AC.1.691

CANADIANA

JAN 6 1998

AGRI-NEWS

January 5, 1998

Horse industry headed in the right direction

The horse industry, as every other industry, is moved and molded by buying and preference trends. It's important for horse breeders to know where the industry is headed so they can make informed decisions in future breeding plans.

"The ***1998 Horse Breeders and Owners Conference***, Red Deer, January 10 to 11, 1998, will present an excellent opportunity for Albertans involved in the horse industry to hear first-hand about some of the trends influencing the industry," says Les Burwash, head of equine programs, Alberta Agriculture, Food and Rural Development. "There are two excellent presentations on the horse industry and trends on this year's agenda."

Dr. Matthew McKay-Smith, medical editor for Equus magazine, has been involved in the horse industry for over 20 years. With Equus since its inception, he's been in an excellent position to observe and follow the trends and changes in horse care practices. McKay-Smith will present and discuss his findings on the subject of horse industry trends.

Don Burt, past president of the Alberta Quarter Horse Association, is well respected as a judge in the industry. He has been involved with the horse industry and in promoting horses for over 50 years. Burt is very up-front with what's happening and where the industry is going and is responsive to the needs of the people in the industry. His presentation *Forging the Future for the 21st Century* promises to be very informative.

McKay-Smith and Burt are two of 14 internationally recognized speakers on the agenda for the ***1998 Alberta Horse Breeders and Owners Conference***.

The conference is arranged so that attendees can follow four lines of interest Quarter Horse, Arabian, Thoroughbred and all breeds. While many follow the program designed for a particular breed preference, conference participants can attend any of the sessions and will receive the printed materials from all sessions.

Conference registration is $75 per person. For more information about the conference, contact Les Burwash in Airdrie at (403)948-8532. Government numbers are toll-free by dialling 310-0000 to connect to a RITE line.

Contact:	*Les Burwash*	*Bob Coleman*
	(403) 948-8532	*(403) 427-5096*

This Week

Horse industry headed in the right direction 1

4-H Leaders -- 'All Aboard' 2

Market focus - the way to produce 2

Responding to Challenge 2

Site specific management and precision agriculture workshop 3

Transportation issues take lead at Grain Summit follow-up 3

Appointments to Agricultural Products Marketing Council 4

Briefs 5

Alberta
AGRICULTURE, FOOD AND
RURAL DEVELOPMENT
Publishing Branch

Agri-News™ is published weekly. Reprinting of articles is encouraged. Your comments and suggestions are welcome. A typewritten edition with wider line-spacing is available to media editors upon request. Editor – Lee Anne Palutke

SHOUT
SHARE
IT

4-H Leaders – 'All Aboard'

More than 300 4-H volunteer leaders from across Alberta will join guests from the western provinces and Montana at the 1998 Alberta 4-H Leaders' Conference. Leaders will travel to Red Deer for a busy weekend of learning and fun, January 16-18, 1998. The sessions designed for both new and experienced leaders follow the theme ***All Aboard***. Through the educational sessions and informal sharing, leaders will be encouraged to stay on track and make the right connections in 4-H.

"The variety of topics gives leaders the skills needed to prepare Alberta youth for leadership roles in their communities and the agriculture industry," says Penny Wilkes, leadership specialist with the 4-H Branch, Alberta Agriculture, Food and Rural Development (AAFRD).

"The conference is a great opportunity for seasoned leaders to share their project ideas and successes with new leaders," adds Kathy Hougham, AAFRD, co-chair of the conference planning committee.

"Positive attitudes trigger enthusiasm and enhance creativity," says Terri Knox from Serviced Enhanced Training, Winnipeg. Knox, the keynote speaker at the conference, will present practical ways for leaders to provide quality service to members, other leaders and parents. She will offer tips to build self esteem, set goals and skillfully solve problems. Workshops include topics on public speaking, entrepreneurship, Internet, livestock projects and challenges of change.

This is the 56th annual 4-H Leaders' Conference. A highlight of the weekend will be the induction of Ken Cox, Camrose, and Angus Park, Trochu, to the *4-H Hall of Fame*. Major onference sponsors are: Alberta Pool, United Grain Growers, Lammle's Western Wear and AAFRD.

Leaders may still register for the conference. The cost is $80. See the Cloverleaf Quarterly magazine for registration details or contact your regional 4-H specialist for an application form.

Contact: *Penny Wilkes* *(403) 422-4H4H*
Kathy Hougham *(403) 422-4H4H*

Market focus – the way to produce

What do consumers want? That's a question producers need to ask before they plan the next year of production.

"A production focus is needed to produce a crop, animal or product, but a market focus is essential to be sure the product addresses marketplace demands and satisfies customers," says Jean Wilson, business development adviser with Alberta Agriculture, Food and Rural Development. "To achieve a global market focus involves learning more about the uses of products and modifying or changing production to suit the consumer."

At ***Managing Agriculture for Profit '98*** (MAP), Mike Leslie of Nakodo Consulting will take participants through the basic shift in understanding that will help producers develop a market-focused mind set.

"Leslie is one of several keynote speakers at the 1998 MAP conference," adds Wilson. "MAP is held at the Holiday Inn, Red Deer from January 27 to 29. The theme that links many of the presentations is *Responding to Change*."

The conference and its presentations are designed to get producers and processors thinking about the exciting possibilities of the future. Other speakers on the MAP '98 agenda include: Jerry Bouma, Edmonton management consultant, addressing changing trends in food and agriculture and Gordon Colledge, a dynamic speaker, who will close the conference with a challenge to work closely together.

"The highlight of the conference is always the producers and processors who share their experiences on how they are managing change," says Wilson. "The sessions, discussions, idea sharing and networking have a unique way of leaving all attendees inspired."

MAP '98 is organized by Alberta Agriculture, Food and Rural Development and Alberta Financial Services Corporation with major support from the Agriculture and Food Council and the Alberta Pool.

For program and registration information, call toll free 1-800-387-6030.

Contact: *Jean Wilson* *(403) 415-2146*
Carmen Andrew *(403) 742-7500*

Responding to Challenge

Responding to Challenge is the theme for the 1998 Banff Pork Seminar at the Banff Centre on January 13 to 16. Speakers from Canada, the U.S., and the Netherlands will provide essential information on a variety of topics of interest to everyone in the pork industry.

"The seminar kicks off with an opening reception on January 13 and continues until noon on January 16," says Marvin Salomons, pork specialist with Alberta Agriculture, Food and Rural Development. "The program features a very strong line-up of seminars and workshops. Major seminar topics scheduled target subjects of boar and sow fertility, effective aids to decision making, challenges in nutrition, addressing environmental concerns, and identifying risk factors in a competitive pork industry."

Cont'd on page 3

Speakers will discuss how the pork industry must identify and respond to environmental concerns and also look at the risk factors involved in marketing pork products around the world. Featured speakers include: Dr. Billy Flowers, North Carolina State University; Dr. Bas Kemp from the Netherlands; Dr. Jerry Shurson and Dr. Larry Jacobson, University of Minnesota; Fred Mitchell, Intercontinental Packers in Saskatoon; and, Dr. Cate Dewey University of Guelph.

"Delegates can choose to attend various workshops held on each of two afternoons of the conference," adds Salomons. "This year, workshop topics cover the important areas of staff motivation and training, breeding herd management, improving the use of records in decision making, and lastly swine feeding program diagnostics. Half of the workshops are repeated the second day so participants have the opportunity to attend all workshops of interest to them."

Registration fee for the conference is $215 per person and includes the opening reception on Tuesday, lunches all three days, an evening social on Wednesday and a copy of the proceedings. Individuals are urged to register and make accommodations arrangements early.

Registration forms are available at all Alberta Agriculture, Food and Rural Development District Offices, at most feed and veterinary supply outlets, and pig assembly yards. More information and registration forms and can be obtained by calling Aileen Reilly at the Banff Pork Seminar office (403) 492-3232, Edmonton, e-mail: **reilly@afns.ualberta.ca** or Marvin Salomons, publicity chairman, (403) 340-5336, Red Deer, e-mail: **marvin.salomons@agric.gov.ab.ca**

Contact: Aileen Reilly *Marvin Salomons*
(403) 492 3236 *(403) 340-5336*

Site specific management and precision agriculture workshop

Understanding site specific management, land resources, and the technology involved in precision farming is key to being able to use these tools effectively. Two-day workshops are being held throughout Alberta between January and March, 1998, for groups of farmers and agricultural industry personnel.

"Precision farming technology is discussed in length during the two-day sessions," says Tom Goddard, soil conservation specialist with Alberta Agriculture, Food and Rural Development. "Presentations on protecting, preserving and enhancing soil and water resources, basic soils and geography, using soil survey reports, using aerial photographs for field mapping, and resource management planning, will give those attending a very solid understanding of these topics."

As part of the workshop, an aerial photo enlargement of each participant's farm will be available. Learning how to interpret and use the aerial photographs and develop site specific management strategies including soil sampling, makes the workshop a real benefit to producers.

"Since the first time they were offered in 1994, the growing interest in these workshops indicates farmers are pleased with what the workshops are providing," adds Goddard. "The emergence of the new technologies and increasing number of skills needed by farmers shows an ongoing need for workshops, courses and seminars."

The Farm Business Management Program (FBMP) is providing majority funding for the workshops. In addition, each participant pays a $75 fee which covers the cost of their aerial photo enlargement and curriculum binder.

Farmers can access the workshops by contacting LandWise Inc, (403) 320-0407, Lethbridge, e-mail: **landwise@telusplanet.net**; Ag retailers who are co-sponsoring the workshops; their local FBMP office or Tom Goddard (403) 427-3720, e-mail: **tom.goddard@agric.gov.ab.ca**

Contact: Tom Goddard
(403) 427-3720

Transportation issues take lead at Grain Summit follow-up

At the winter meeting of the Pacific NorthWest Economic Region (PNWER) in Coeur d'Alene, Idaho, agriculture representatives from Pacific northwest states and Canada reaffirmed their commitment to continue work on the recommendations that came out of the June 1997 Grain Summit in Seattle. Producer organizations represented at the meeting included the Idaho Grain Producers Association, Idaho Barley Commission, Oregon Wheat Commission and the Washington Barley Commission.

Producers indicated they will continue to work with Canadian organizations to hold follow-up meetings in early 1998 to discuss and develop actions and strategies to achieve resolution of outstanding Grain Summit recommendations.

"Our Commission was unable to attend the Seattle meeting, but we support the recommendations and we are keenly interested in working with our state and Canadian counterparts to deal with these issues," says Norman Goetze of the Oregon Wheat Commission. "Oregon wheat producers are equally concerned about trade issues and the need to pursue more efficiencies in transportation and market development."

Transportation issues dominated the discussions at the PNWER Agriculture Working Group meeting. Evan Hayes of the Idaho Grain Producers Associations indicates," Grain movement is a major problem in Idaho, with grain piled up on

Cont'd on page 4

farms and there is no ability to get it moving. We are beholden to the railways and they are not performing. It is imperative that we maintain an efficient barge system."

"There is little alternative and no competition in the system," adds Bar Olberding of the Idaho Grain Producers Association. "Idaho, Oregon and Washington truck weights are lower than those in Alberta, Montana and other states and we lack the ability to compete in truck movement of grain, particularly in the domestic market."

Two recommendations were passed by participants at the meeting:

- that PNWER request the U.S. Surface Transportation Board and the U.S. Congress to provide remedies to the captive rail shipment of agriculture commodities in the western United States.
- that PNWER request the U.S. Department of Agriculture to support the raising of the maximum gross truck weights in Idaho, Oregon and Washington to 129,000 pounds, and that the USDA respond to PNWER's request with comments as soon as possible.

"Western Canadian grain producers organizations remain committed to continuing the Grain Summit process and look forward to working with their American counterparts on follow-up activities," says Ken Moholitny (Alberta Grain Commission) PNWER co-chair for the Agriculture Working Group. "The recommendations from this meeting will be shared with them."

PNWER Grain Summit Recommendations

Whereas agricultural trade is of great importance to the economies of Canada and United States, and recognizing that a number of barriers exist which constrains grain trade between both countries, grain producer organizations attending the June 14, 1997 PNWER Grain Summit Meeting in Seattle, Washington unanimously agree to the following recommendations:

1. It is recommended that the United States eliminate its export subsidies and that both countries eliminate discretionary pricing beyond normal commercial practice; modify domestic agriculture policies to remove imbalances and trade distortions in both countries and work together to persuade other countries to do likewise.
2. It is recommended that Canada move to cash buying and selling of wheat and barley to allow for price discovery and arbitrage.
3. It is recommended that Canada eliminate Tariff Rate Quotas on United States barley.
4. It is recommended that Canada and United States move towards trade in wheat and barley on value-based specifications.
5. It is recommended that Canada and United States eliminate end-use certificates on wheat trade.
6. It is recommended that Canada and Untied States adopt non-discriminatory access to each others' grain handling and transportation infrastructure.
7. It is recommended that Canada and the United States standardize trucking regulations.
8. It is recommended that Canada deregulate and create a commercially driven and competitive rail transportation system for grain.

Contact: *Ken Moholitny*
(403) 427-3078

Appointments to Agricultural Products Marketing Council

Ed Stelmach, Minister of Agriculture, Food and Rural Development, has announced the appointments of two Albertans to the Agricultural Products Marketing Council.

Ron Sutka of Cranford farms, land originally homesteaded by his grandfather, has a strong agricultural background. As well as a position as vice-president of the Taber East/West Local Beet Growers' Association, Sutka is past vice-president of Alberta Sugar Beet Growers Marketing Board and past 2nd vice-president of Canadian Sugar Beet Producers' Association. He also served in various capacities with other associations and marketing boards.

George Murphy, originally from the state of New York, moved his family to Alberta in 1973. In 20 years as a full-time farmer near Peace River, he raised grain, oilseed, grass seed, peas and alfalfa. He served 14 years as director of the Nampa Seed Processors Co-op, and was involved with the Alberta Pulse Growers Commission and Farming for the Future. Now in semi-retirement, Murphy devotes his time to harvesting several hundred acres of alfalfa.

"These two proven leaders with their level of experience in the agricultural and marketing sectors will enhance the level of expertise on the Agricultural Products Marketing Council," says Stelmach. "I look forward to working with them."

The eight member Agricultural Products Marketing Council oversees the agricultural marketing boards and commissions in Alberta. The Council mission is to enable commodity organizations to assist producers in their efforts to be more profitable and globally competitive in Alberta's expanding agriculture and food industry.

Sutka and Murphy have been appointed to three-year terms with the Council.

Contact: *Ron Glen* *Brian Rhiness*
(403) 427-2164 *(403) 427-2137*

Agri-News Briefs

Farm machinery economics

Although a common part of every operation, farm machinery decisions are becoming more complex. Alternatives and choices abound in the marketplace. To help answer some of the questions farm managers face, a four-day course is being offered on **Farm Machinery Economics**, February 11, 12, 18 and 19 at the Provincial Building in Taber. Questions on whether to repair or replace; buy new or used; lease, buy or custom hire will be addressed. The tools and skills using sound economics and computer programs to analysis various alternatives for equipment ownership and use will be presented. The program will also consider appropriate farm equipment sizing based on individual operations. Registration fee is $138 per person. For more information or to register, contact Gordon Williams (403) 320-3313 or Brad Smith (403) 223-7907. To register, call 1-800-572-0103, ext. 3323.

Feedlot production seminar

A day of discussion of current feedlot topics for cattle managers, consultants and veterinarians is planned at the Black Knight Inn, Red Deer, on January 21, 1998. The ***Red Deer Feedlot Production Seminar*** includes sessions on controlling feedlot runoff and design implications; manure utilization; resources for beef industry expansion in Alberta; feed bunk management – barley processing; feed bunk management – fiber in rations; and, sorting cattle – a management tool. As well as the information provided during the sessions, several feedlot resources will be on display. The Livestock Expansion and Development Team will also be on hand as a resource to participants. Registration fee is $25 per person and registration deadline is January 16, 1998. For more information, contact Rob Hand, beef specialist or Dolores Mason, client service representative both with Alberta Agriculture, Food and Rural Development, (403) 340-5364 or e-mail **mason@agric.gov.ab.ca**

Production of bedding plants in greenhouses

In cooperation with the Alberta Greenhouse Growers Association, Alberta Agriculture, Food and Rural Development is organizing two workshops on the production of bedding plants in greenhouses. The focus of these workshops is in knowledge management. Specialists will deliver information on greenhouse environments, seeding, transplanting, fertilizer and water management. Integrated pest management will be discussed in the afternoon sessions. The first workshop is at the Agriculture Centre, Lethbridge, on January 27, 1998. The second workshop is scheduled at the Crop Diversification Centre – North, Edmonton, on February 10, 1998. Both workshops will be held from 9:00 a.m. to 4:00 p.m. There is a cost of $32.10 with cheques payable to the Alberta Greenhouse Growers Association. For further information, contact Dr. Mohyuddin Mirza (403) 415-2303, Edmonton. Alberta government number are toll free by dialing 310-0000 to connect to a RITE line.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51423 9504

4C.1.691

AGRI-NEWS

January 12, 1998

CANADIANA
JAN 19 1998

Agriculture Week now an autumn affair

Agriculture Week is now being celebrated in the fall and will be called ***Agriculture and Food Week***. The change from March to October came as a result of discussions between Ed Stelmach, Minister of Agriculture, Food and Rural Development and Growing Alberta executives.

"Serious thought goes into making changes to any tradition," says Stelmach. "By making a switch to mid-October, there is better opportunity for Albertans to take part. *Agriculture and Food Week* will come right on the heels of Thanksgiving, a time when all Albertans, both urban and rural, recognize agriculture as a 'giving' industry, one that is committed to growing Alberta's economy and quality of life."

"From the Thanksgiving turkey to the potatoes and carrots, even the cranberries, what you eat is the result of agriculture," says Paul Hodgman, executive director, Growing Alberta. "It's time we took the momentum of the season one step further. Also, by moving *Agriculture and Food Week* to Thanksgiving, there is a better opportunity to have a strong presence in our schools as this is the time they tend to feature agriculture and food."

Furthermore, the Alberta Agriculture Hall of Fame ceremony, held every other year, will coincide with *Agriculture and Food Week* on October 16, 1998, not March of 1999 as previously planned.

Formed in 1995, Growing Alberta is an industry-government partnership designed to educate the urban public about the agriculture and food industry's commitment to responsible stewardship and the delivery of safe and wholesome food. Growing Alberta, representing many farm commodity groups and food industries, is an integral part of the shared industry and government vision to expand Alberta's primary agriculture industry to $10 billion and the value-added food industry to $20 billion by 2005.

Agriculture and Food Week will be held from October 12th (Thanksgiving) to October 16th, 1998 (Agriculture Hall of Fame Ceremony).

Contact: *Ron Glen*
(403) 427-2137

Paul Hodgman
(403) 986-4788

This Week

Agriculture Week now an autumn affair 1

Strawberry and raspberry – the Alberta flavors 2

Supply chains – links to the future 2

Key Leaders focus on 4-H 2

The future is pulsing 3

Growing the farm business 3

Briefs 4

Alberta
AGRICULTURE, FOOD AND
RURAL DEVELOPMENT
Publishing Branch

Agri-News™ is published weekly. Reprinting of articles is encouraged. Your comments and suggestions are welcome. A typewritten edition with wider line-spacing is available to media editors upon request. Editor – Lee Anne Palutke

Strawberry and raspberry – the Alberta flavors

The Alberta berry crop industry continues to grow rapidly. Consumers, both urban and rural, have discovered the taste of locally grown fresh fruits.

"New hardy, fresh and juicy varieties, improved management techniques and a variety of marketing outlets allow Alberta consumers availability to these crops from June to October," says Lloyd Hausher, fruit crop specialist with Alberta Agriculture, Food and Rural Development. "Although it's estimated that there are more than 200 producers presently growing berries in Alberta, the demand continues to outstrip supply."

To meet a growing demand for production information from present and potential or new producers, the 12th annual Commercial Berry Production School is scheduled for February 11 to 12, 1998 at the Regency Hotel, Edmonton.

The school, designed for both new and established growers, will provide basic information for those entering the industry and the latest developments and recommendations on production and marketing of berry crops.

"The first day includes information on requirements for setting up a berry farm, location, site selection, signs, marketing channels, customer expectations and opportunities," says Hausher. "Time will also be devoted to the specifics of raspberry production including: plant types, plant sources, establishment, fertility, crop management, pest and weed control, irrigation, harvest, marketing, and production estimates. Both floricane, summer fruiting, and primocane, fall fruiting, types will be discussed."

Day two will be solely devoted to strawberry production. Similar topics, with additions such as mulching and ammonification of mulch will be covered. Both Junebearing and day-neutral strawberry types will be covered.

"Established, experienced producers will give brief overviews of how they got started and their current production practices," adds Hausher.

The Berry School is co-sponsored by the Alberta Market Gardeners Association (AMGA). Registration is available at the door for individual or both days. Non-AMGA member rates are $50 per person per day or $90 for both days. Reduced rates are available for members. Registration starts at 8:00 a.m. each day.

For more information on berry production or registration, contact Lloyd Hausher at (403) 362-1309. Government numbers are toll free by dialing 310-0000 to connect to a RITE line.

Contact: Lloyd Hausher
(403) 362-1309

Supply chains – links to the future

The Canadian agri-food system will be increasingly characterized by supply chains. In fact, so much so that in the future, a primary produce or a food processor operating completely independently will become a rarity. So stated an article in the spring 1997 Value Added Advisor, a newsletter written by Toma and Bouma Management Consultants.

"Jerry Bouma will address the idea of supply chains in his presentation on Changing Market Trends in Food and Agriculture at Managing Agriculture for Profit '98," says Jean Wilson, business development adviser with Alberta Agriculture, Food and Rural Development.

MAP '98 is being held at the Holiday Inn in Red Deer, January 27 to 29, 1998. The conference and its presentations are designed to get producers and processors thinking about the exciting possibilities of the future.

"Gordon Colledge, a dynamic and entertaining speaker who has participated in several MAP conferences in the past will reinforce the importance of working together in his keynote address that ends the conference," adds Wilson. "He will talk about the importance of building networks and business contacts in today's changing world. Individuality is no longer the way to successful business."

To kick off the conference, Gordon McKnight, a futurist, will ask participants if they are Ready for a Changing World. The conference promises to get off to an inspiring and unusual start with this presentation.

"The highlight of the conference is always the producers and processors who share their experiences on how they are managing change," says Wilson. "The sessions, discussions, idea sharing and networking have a unique way of leaving all attendees inspired."

MAP '98 is organized by Alberta Agriculture, Food and Rural Development and Alberta Financial Services Corporation with major support from the Agriculture and Food Council and the Alberta Pool.

For program and registration information, call toll free 1-800-387-6030.

Contact: Jean Wilson *Carmen Andrew*
(403) 415-2146 *(403) 742-7500*

Key Leaders focus on 4-H

Key 4-H Leaders from across Alberta spent a weekend focusing on 4-H and sharing information. Approximately 30 dedicated leaders met at the Alberta 4-H Centre in Westerose to participate in **Key Leader training** in November, 1997.

Cont'd on page 3

Key Leaders are volunteers who assist 4-H club leaders and district 4-H council members by providing expertise and support. Penny Wilkes, provincial 4-H home economics and leadership specialist with Alberta Agriculture, Food and Rural Development, explains, "Key Leaders are valuable partners in 4-H. They are the link between the regional 4-H specialists, district councils and clubs. Key Leaders provide a wealth of information and resources that enrich the 4-H experience for members and club leaders." Each of the Key Leaders is appointed by their district 4-H council.

Learning how to orientate new 4-H club leaders into Alberta's 4-H program was the main focus of the training. Key Leaders were updated on the revised horse, canine and crafts projects. The highlight of the weekend was a dynamic session on coaching skills led by Hugh Phillips from H. P. Training Works. In addition, the Key Leaders participated in a discussion on the results of the National 4-H Measures of Success and the Alberta 4-H Needs Assessment. John Tackaberry, Alberta Agriculture, Food and Rural Development, Edmonton, and Jerome Stang, Camrose UFA welcomed the new key leaders into the program this year. UFA are the exclusive sponsors of the Key Leader program, and the success of the training is a direct result of their continued support.

Contact: *Penny Wilkes*
(403) 422-4H4H

The future is pulsing

At the Innovations for Reduced Tillage and Pulse Production seminar held in December, researchers George Clayton, Lacombe Research Centre, and Perry Miller, Semi-Arid Research Centre, noted that pulses are an excellent fit for reduced tillage cropping systems. Peas and lentils are especially good for drier parts of the prairies.

"At the conference, researchers described the results from several crop rotation trials in southwest Saskatchewan," says Rob Dunn, Lethbridge regional conservation coordinator with Alberta Agriculture, Food and Rural Development. "Yield and protein levels for spring wheat were found to be higher when grown on pea or lentil stubble as compared to wheat stubble. This confirms the benefits of pulses in rotation observed in studies from the wetter regions of the prairies."

Peas and lentils are well suited to recropping in the drier soil zones because they are very efficient in converting available water to yield. Peas have performed surprisingly well, out yielding and showing more drought tolerance than spring wheat.

"The critical period for heat or drought stress on peas is during the flowering period," says Dunn. "For this reason, peas should be seeded as early as possible in the drier soil zones to encourage pod set by early July."

Other benefits for pulse crops on stubble include their ability to fix nitrogen from the atmosphere. Because of this, they are not affected by low nitrogen levels to the same degree as other crops.

"Research in Swift Current has shown that peas and lentils do not rely on deep sub-soil moisture to the same extend as wheat or mustard," adds Dunn. "This was confirmed in trials that showed pea yields on stubble were 88 per cent of summer fallow compared with wheat and mustard yielding only 66 and 60 per cent on stubble."

Peas and lentils are well suited to be direct seeded in the drier soil zones. Standing stubble helps provide a protective microclimate for a growing crop during the early growth stages. Direct seeded yields were 10 per cent higher for peas and 15 per cent higher for lentils compared to tilled plots in southwest Saskatchewan research trials.

"Clayton and Miller also emphasized the weed control challenges for first time pulse crop growers," says Dunn. "Perennial weeds must be controlled the year before and in-crop control of grassy and broadleaf weeds must be early. Both peas and lentils are very poor competitors with weeds."

Copies of Clayton and Miller's presentations are available. To receive a copy, contact Rob Dunn, (403) 381-5117.

Contact: *Rob Dunn*
(403) 381-5117

Growing the farm business

A farm transfer resource guide is now available from Agriculture Financial Services Corporation and Alberta Agriculture, Food and Rural Development. The guide, ***Growing the Farm Business Together***, provides a list of steps farm families should consider when doing farm succession planning.

"Doing succession planning as early as possible and with open communication with all family members are the most important aspects of a succession plan," says Garry Bradshaw, management specialist with the agricultural business management branch of Alberta Agriculture, Food and Rural Development. "The guide offers six steps to help farm families make good decisions about the succession plan."

The guide lists the tasks in each step of the process and provides outcomes that can be expected when each step is complete. It is also gives a comprehensive listing of resources available that can help the planning process at each step.

"Copies of ***Growing the Farm Business Together*** are available by contacting the local Alberta Agriculture office," adds Bradshaw.

Cont'd on page 4

Succession planning publications and videos available at local district offices or the Publications Office, 7000 - 113 Street, Edmonton, AB T6H 5T6, include:

- Who's managing the farm – video (available from the Edmonton office only) - $40 (plus GST)
- Finding common ground – video (available from the Edmonton office only) - $40 (plus GST)
- Finding common ground – workbook - $8 (plus GST)
- Ownership and farm transfers – $8 (plus GST)
- Business arrangements – $8 (plus GST)
- Farming as a corporation – $8 (plus GST)
- Farming as a partnership – $8 (plus GST)
- Operating as a joint venture – $8 (plus GST)
- Tax management strategies for farmers – $10 (plus GST)
- Putting it on the table – CD-ROM (test version only)

Please add $2 shipping and handling charges (plus GST) for all orders being mailed out.

Home study courses available through local district offices or the Home Study Program, 201, 7000 - 113 Street, Edmonton, AB T6H 5T6, include:

- Creating an ownership plan – free
- Farming is about people – workbook and video - $50 (plus GST)
- workbook only – $10 (plus GST)
- Financial files – $15 (plus GST)
- Retirement files – $15 (plus GST)
- Training the next generation – $30 (plus GST)
- Farm estate planning – $35 (plus GST)

Please add $2 shipping and handling charges (plus GST) for all orders being mailed out.

Contact: Garry Bradshaw (403) 556-4244

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51423 9629

Agri-News Briefs

Alberta farms and farmland

In 1996, there were 58,990 farms in Alberta. The 1996 Census of Agriculture shows that this is up three per cent from 57,245 in 1991. Total farmland increased as well by one per cent. Although there was an overall increase, Alberta's average farm size is 881 acres, down from 898 acres in 1991. Alberta accounted for 24.6 per cent of Canada's gross farm receipts and average provincial farm revenue was up 26.3 per cent to $134,107. Expenses also increased by 23.4 per cent to $113,057. The average value of capital per farm in the province is $680,577. Compared to 1991, Alberta seeded acres were up 2.7 per cent but summer fallow area was down 18.9 per cent. Irrigated crop area rose to 1.28 million acres which is 63.8 per cent of all irrigated land in Canada. The no till area was 1.94 million acres, up 215.3 per cent from 1991.

Sales of prepared foods on the rise

A survey of supermarket prepared food sections, completed by the Canadian council of Grocery Distributers and Food Marketing Institute in fall, 1997, showed that the average percentage of store sales dollars from prepared food has increased three-fold in Canada and doubled in the U.S. Among other trends in supermarket activities the survey noted that store brands continue to outpace overall market growth, increasing sales by 10 per cent. The average price per item carried in supermarkets was $1.96 in Canada and $2.29 in the U.S. Seafood sections are the number one addition to supermarket sections, followed by deli sections.

Harvesting profits

Alberta Agriculture, Food and Rural Development is organizing a **Harvesting Profits from Produce** conference, at the Crossroads Hotel, Calgary, on February 11 to 13, 1998. The conference focuses on post-harvest handling and marketing of fresh fruits, vegetables and potatoes. Technical and information sessions, geared to commercial producers and produce buyers, provide up-to-date trends in the industry. Some of the presentations include: food safety and the impact of HACCP; electronic information in the produce industry; potato prospects in the food service industry; the Canadian produce industry, now and in the future; dealing with reputable buyers; Produce Marketing Association's study on produce trends; produce handling and precooling technology; and, logistic and transportation partners. For more information please contact Betty Vladicka, Crop Diversification Centre North, Edmonton, (403) 415-2305 or (403) 422-1789; fax (403) 422-6096.

CANADIANA

JAN 22 1998

AGRI-NEWS

January 19, 1998

Fun or deadly fun, you decide

To many farmers, a snowmobile is almost as important in the winter as a combine is in the summer. Depending on the amount of snow, it might be your only means of transportation to the other side of the farm. There have even been times when it's the only way to get the kids to school. The snowmobile is used to check on livestock, haul a few small bales or some freshly cut wood and helps in a variety of other activities. Whether it's work or play, safety should be of utmost importance because a snowmobile, just like any other piece of machinery on the farm, can be deadly.

Snowmobiling is becoming an increasingly popular sport in Alberta. As a result, over the last few years, there have been more snowmobile collisions than ever before. In the 1996/97 snowmobile season, hospital emergency departments treated 107 patients for snowmobile-related injuries, 40 per cent were not wearing helmets. Of those injured, 92 were driving, 10 were riding and five were being towed behind a snowmobile. In 1996, there were seven deaths compared with one in 1990. Why the drastic increase? For starters, there was plenty of snow through most parts of the province over the last couple of winters and plenty of snow means plenty of snowmobilers.

From 1990 to 1996, a total of 24 people have been killed in snowmobile-related incidents in Alberta. Of the 24 fatalities, 23 were male. Twenty of the deaths occurred in the northern region of the province. Ten deaths involved young Albertans under the age of 25. Eight of the snowmobilers hit a stationary object or animal, five incidents involved a collision with another vehicle or snowmobile and three incidents involved an avalanche. Of the 18 fatalities in which the blood alcohol level was analyzed, 11 had consumed alcohol.

So where are these snowmobilers coming from? Statistics from 1994 help answer that question. In 1994, a tragic snowmobile year, 114 snowmobile operators were hospitalized in Alberta. Of those, 11 per cent involved residents of Edmonton or Calgary. Another 60 per cent of hospitalizations involved people living in urban centers. Less than 30 per cent of those injured were Alberta farmers.

January 18 to 24
is
International Snowmobile
Safety Week

That doesn't mean Alberta farmers can rest easy. "While not having the final statistics from last year, we do know that during the 1996-97 snowmobile season, there was a sharp increase in safety-related incidents. Being a safe rider means riding within your own capabilities," says Louise Sherren, executive director of the Alberta Snowmobile Association. "Many of the problems can be avoided by using common sense."

Cont'd on page 2

This Week

Fun or deadly fun, you decide 1

Dairy management specialist 2

The warmest, driest December on the books 3

Grain beetles, common but preventable 3

Rural leadership for the 21st Century 3

On-farm nutrient management 4

Briefs 5

Alberta
AGRICULTURE, FOOD AND
RURAL DEVELOPMENT
Publishing Branch

Agri-News™ is published weekly. Reprinting of articles is encouraged. Your comments and suggestions are welcome. A typewritten edition with wider line-spacing is available to media editors upon request. Editor – Lee Anne Palutke

Solomon Kyeremanteng, manager of Alberta's Agriculture Farm Safety Program, agrees. "It's a simple matter of being familiar with the terrain. Most farm people know their surroundings, they know where their fences are, they know where it's safe to ride. Then you have some of the urban snowmobilers, who at times end up trespassing on private property, who don't know their surroundings and don't know where the fences are."

There have been some incidents, however, in which snow has either melted or packed at such a rapid rate, a fence suddenly appears where only days before it was completely covered in snow. Even farmers have been known to hit their own fences, particularly in cases such as this.

Already, Alberta has recorded its first snowmobile-related fatality of 1998. The victim was a teenaged male who struck a fence pole on the family farm.

Whether the problem lies with rural or urban residents, safety education is the key to preventing collisions and fatalities. 4-H offers snowmobiling as a project, one of about 30 available to young people between the ages of nine and 20. Members learn basic skills, proper dress, safety habits and laws governing the sport.

Alberta 4-H Head Mahlon Weir is a strong supporter of the program. "What I like about the project is that it provides a safe, fun environment for young Albertans to learn the basics," he says. But the education doesn't end in the classroom. "Skills and attitudes developed while being positively influenced by knowledgeable adult volunteer leaders, in a 4-H club environment, last the member a lifetime," says Weir.

Safety programs are important, but just as important is common sense when it comes to avoiding accidents. Research shows that alcohol, speed, driving at night, unsafe operation and operator inattention are common contributing factors in snowmobile injuries. Controlling these factors could significantly reduce the number of injuries and deaths. When speed and a daring attitude ride together, accidents and death can all too often be the destination.

After anxiously awaiting the arrival of snow, thousands of snowmobilers are now getting set to take to the trails and the importance of safety education, safety campaigns and common sense are increasing. As more riders take the time to participate in these programs available to them and take the time to think, snowmobiling will remain a wonderful way to spend the winter season.*Statistics courtesy of the ***Injury Prevention Centre***, Alberta Snowmobile Association and Alberta Transportation and Utilities.

Contact: *Solomon Kyeremanteng* *(403)427-4227* *Louise Sherren* *403)453-8668*

Mahlon Weir *(403)427-4463*

Dairy management specialist

On December 8, 1997, Dr. Divakar Ambrose, was named the new dairy management specialist with the Beef and Dairy Group of Alberta Agriculture, Food and Rural Development. He is a veterinarian by training with a graduate degree in Animal Reproduction from India and a doctoral degree in Reproductive Physiology from the University of British Columbia and has several years of experience in reproductive management of dairy cattle. He has served as veterinarian for a Provincial Milk Producers Federation in India, and has held research and/or teaching positions at the University of Florida (U.S.A.), University of British Columbia (Canada) and the Tamil Nadu Agricultural University and National Dairy Research Institute (India).

"Ambrose has received advanced training and has expertise in ultrasonography, embryo transfer and in-vitro embryo production. He has done research on dairy cattle reproduction in collaboration with well-known reproductive physiologists in different parts of the world," says Dale Engstrom, head of the Beef and Dairy Group. "His recent research at the University of Florida focused on methods to enhance reproductive efficiency in dairy cattle, particularly under heat-stress conditions and addressed methods to improve embryo survival in cattle, nutrition-reproduction interactions and the use of recombinant bST in lactating Holstein cattle. He has extensive experience and knowledge in the application of newer management tools such as timed artificial insemination and timed embryo transfer. This knowledge was acquired working with large commercial dairy farms under North American conditions."

Ambrose will be part of the staff of the new Dairy Research and Technology Center, a joint venture of the University of Alberta, Alberta Milk Producers and Alberta Agriculture, Food & Rural Development. Over the next few months he will be developing a research program aimed at improving reproductive performance in Alberta dairy herds.

Ambrose welcomes input to the development of this program from dairy producers, industry technical representatives and veterinarians.

Contact: *Dr. Divakar Ambrose* *(403)422-0807*

Dale Engstrom *(403)427-4516*

e-mail: ***divakar.ambrose@agric.gov.ab.ca***

Cont'd on page 3

The warmest, driest December on record

Both November and December had warm, dry conditions typical of what can be expected in Alberta when El Nino occurs December's temperature departures from normal were double the departure reported for November.

"The overall provincial average temperature was 7.3 degrees above normal and the provincial average precipitation was well below normal for December in Alberta," says Peter Dzikowski, agri-weather specialist with Alberta Agriculture, Food and Rural Development. "December is usually the second coldest and the fifth driest month of the year. December, 1997 was the warmest and driest on record for several Alberta locations."

The 7.3 mm provincial average precipitation was 15.2 mm below the 1961 to 1990 average of 22.5 mm for December.

All regions reported below normal precipitation in December. The Peace region was the wettest, reporting 68 per cent of normal December precipitation. Amounts of 1.4 to 30.4 mm, or five to 113 per cent of normal were reported in Alberta.

Grande Prairie Airport recorded 30.4 mm of precipitation, 113 per cent of normal. In contrast, Red Deer Airport reported only 1.4 mm of precipitation, the driest December on record over the past 60 years.

The provincial average temperature was 7.3 degrees above the 1961 to 1990 average of -11.2 degrees C. Most Alberta locations reported monthly average temperatures ranging from four to 12 degrees above normal.

"Temperature departures increased from southern to northern Alberta," says Dzikowski. "The northeast, northwest and Peace regions reported the greatest temperature departures. The northeast region departure was 9.1 degrees above normal while the northwest and Peace region departure was 8.9 and 8.6 degrees respectively. The central region departure was 7.3 degrees while the southern region was 5.7 degrees warmer than normal. The warm, windy, dry conditions and bare ground set the stage for the serious grass fire in southern Alberta."

Edmonton International Airport and Beaverlodge CDA reported the warmest December on record based on 37 and 70 years of record, respectively. Ballater CDA reported the greatest temperature departure in Alberta, 11.8 degrees above the monthly average of -14.4 degrees for December.

Averages are based on data recorded at 45 Environment Canada climate stations across the province.

You can find more details at the Ropin' the Web Internet site at: **http:\\www.agric.gov.ab.ca\climate**

Find information on typical El Nino conditions at Environment Canada's Internet site at:
http://www.mb.ec.gc.ca/Nino/PNR_charts_English.html

Contact: Peter Dzikowski
(403)427-3594

Grain beetles, common but preventable

Rusty grain beetles are like the common cold; they're always around in small numbers. When conditions are right, they invade stored grain and reproduce at a staggering rate.

"An invasion of grain beetles results in loss of grain quality and quantity," says Gordon Frank, crop specialist with Alberta Agriculture, Food and Rural Development, Brooks. "It also means grain that's unsaleable through most grain buying locations."

Grain should be below 15 degrees Celsius as soon after harvest as possible. Aeration helps considerably with this drying and temperature lowering. Even with aeration, however, there can be problems. Warm, wet spots can concentrate at the top of the bin and this is where the problem with grain beetles first gets going.

"Prevention is important. At this time of year, the best action is to monitor temperature and visually check stored grain, moving quickly with control measures if beetles are found," says Frank. "If hot spots or insects are found, control is possible in the cold weather by moving the grain to cool it. In most cases, treatment will be required."

There are two natural diatomaceous earth products available in Alberta that can be used to treat grain beetles, Protect-It and Insecto. Some success has been seen by applying these two products to the surface where beetles are concentrated but, both are best applied by mixing into the grain.

Contact: Gordon Frank
(403)362-1212

Rural leadership for the 21st Century

Sustaining economic development for survival is the most important major issue facing agriculture and community leaders in Alberta for the next 10 years, states a study released at the Leadership 2000 conference in October, 1997.

"After two years of research, Alberta Leadership Education for Agricultural Development (LEAD) released study findings," says Kathleen Ozmun, rural development specialist with Alberta Agriculture, Food and Rural Development, Smoky Lake. "According to the study, the biggest barrier to leaders successfully addressing major issues is allocating time to lead."

Alberta LEAD includes representatives from Alberta Agriculture, Food and Rural Development, the University of Alberta Faculty of Extension and Rural Education and Development Association (REDA).

Cont'd on page 4

Other major challenges identified by rural leaders in the study include:

- influencing political processes and government decisions affecting agriculture industry and rural communities; and,
- maintaining quality of life, services and the sustenance of the rural community.

The largest barriers being faced, include:

- marketing knowledge needs in the global context; and,
- rural population's struggle with changes re-shaping rural communities.

"Over 80 per cent of survey respondents agreed that the development of leadership capacity for collective or group decision making and collective/group action is required by the agriculture industry and rural communities to meet future needs," says Maureen Barns, rural development advisor with Alberta Agriculture, Food and Rural Development, Edmonton. "External forces, such as globalization and trade agreements, are seen as forcing change in behavior in both agriculture industry and rural communities."

Important leadership behaviors that lead to success are transformational leadership skills, those that will change the agriculture industry and rural communities. They include: establishing communication networks; inspiring a shared vision; constantly learning; showing openness to new ideas; and, willingness to identify and address new problems.

Copies of the research abstract, recommendations and copies of the full report are available by calling John Melicher of REDA at (403)451-5959.

Contact: *Maureen Barnes*
(403)427-4369

Kathleen Ozmun
(403)656-3613

On-farm nutrient management

A lot of discussion about manure is going on these days. Livestock producers are taking a closer look at manure management and need to know how to make the most of the nutrients in manure.

"Manure management is certainly an issue that is on the minds of Alberta farmers and ranchers," says Peter Kuperis, agrologist with Alberta Agriculture, Food and Rural Development. "Understanding manure management is the focus of a series of nutrient management workshops sponsored by Alberta Agriculture's conservation and development branch and the Canada-Alberta Farm Business Management Program."

Producers can attend a one-day session that will closely examine nutrient and manure management to sustain soil and water quality. Issues being covered include: general best-management practices for the safe and economic handling of animal manures; environmental liability; and, guidelines and standards from the provincial Code of Practice.

"Producers who want to develop a nutrient management plan for their operation can attend a two-day workshop," adds Kuperis. "The workshop will use aerial photographs and other information to develop a nutrient management plan that is specific to each producer's land resources. The workshop will also help producers develop manure management strategies and identify the best management practices for their own operations."

These one and two-day workshops are being held throughout Alberta, January through March, 1998. For session dates and locations, contact Peter Kuperis, conservation economics agrologist with Alberta Agriculture, Food and Rural Development, (403)427-3819.

Contact: *Peter Kuperis*
(403)427-3819

Agri-News Briefs

Alberta Board member on the CFIA

Ben Thorlakson of Airdrie was appointed to the Ministerial Advisory Board on the Canadian Food Inspection Agency (CFIA) on December 23, 1997 by Agriculture and Agri-Food Minister Lyle Vanclief. Thorlakson is president of Cattleland Feedyards Ltd. and has actively represented the interests of the Canadian beef industry for 20 years. He has served as vice-president of the Canadian Cattlemen's Association, past chair of the Alberta Cattle Commission and former president of the Alberta Cattle Feeders Association. Thorlakson's experience also includes membership on the Management Board of the Alberta Science and Research Authority, co-chair of the Canada/U.S. Animal Health Working Group and being a member of the North American Free Trade Agreement (NAFTA) Beef Working Group. Members of this Ministerial Advisory Board were chosen for their knowledge and areas of expertise related to the CFIA mandate of food safety, market access and consumer protection.

Native plants workshop

Growing and Marketing Native Plants: a workshop for potential growers is a one-day workshop held at Olds College on February 21, 1998. The workshop is part of an initiative to encourage growth of the native plant industry. Native plants are in demand for industrial reclamation, beautification projects, restoration of historic sites, and are used by florists, nursery trades and aboriginals. They are adapted to the Alberta climate and, once established, require minimum care. Topics covered at the workshop include: what are native plants; future trends in the industry; demand/supply issues; seed suppliers and sources; site selection and preparation; planting methods and equipment; maintenance of the stand; disease control; harvesting techniques and equipment; seed processing and cleaning; regulations on seed quality; markets and marketing; and, contracts and pricing. The workshop is designed to give potential growers the information they need to make planning decisions and get started. Registration is $25 and includes lunch. For more information, contact Heather Gerling or Suzanne Gill at (403)427-6597.

Exploring organic alternatives

The three-day conference, Exploring Organic Alternatives, is being held in Saskatoon, Saskatchewan on February 8, 9 and 10, 1998. The conference is an opportunity for farmers, organic or conventional, to exchange ideas and learn from one another. Speakers will present insights in organic farming systems and how to go about changing from conventional to organic farming. The benefits of organic farming will be discussed at the conference and workshops will be provided For registration information, contact Hart Haidn, conference coordinator, at (306)956-0832, fax: (306)956-0834, or e-mail: **hhaidn@sk.sympatico.ca** or call Joanne Kowalski at (306)966-8893, fax: (306)966-8894, or e-mail: **jck@fc.usask.ca** For biographies on guest speakers, a copy of the events calendar, organizers' profiles and registration and travel information visit the conference website at: **www3.sk.sympatico.ca/hhaidn**

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51423 9744

AGRI-NEWS

January 26, 1998

JAN 29 1998

Rural Crime Watch Week

Rural Crime Watch Week this year is February 1 to 7. Rural Crime Watch (RCW) promotes crime prevention throughout the province and includes rural residents in the program as extra 'eyes and ears' working together with the RCMP.

"During Rural Crime Watch Week, local associations are encouraged to work with the media in the area and hold events to profile their associations," says Lynn Roberts, president of the Alberta Provincial Rural Crime Watch Association.

There are currently 108 community RCW associations in the province with a combined membership of approximately 20,000 households. The program, started as a pilot project in 1979, has one major goal to decrease rural crime that affects farmers, ranchers, acreage owners and others who have a vested interest in rural communities.

The 18th annual RCW workshop is a major provincial event where all associations across the province and neighboring provinces have the opportunity to get together, share ideas and listen to informative speakers address a variety of topics.

"The Alberta Provincial Rural Crime Watch Association works with the workshop hosts in organizing the annual workshop," says Cliff Munroe, Alberta Agriculture, Food and Rural Development's liaison with the RCW program. "The Association includes representatives from a number of RCW associations in Alberta as well as honorary directors from Alberta Environmental Protection, Alberta Farmers Advocate, Alberta Justice, Alberta Livestock Marketing, Alberta Cattle Commission, United Farmers of Alberta and the RCMP."

This year's workshop is hosted by Stony Plain & District Crime Prevention Association and is being held at the Horizon Stage, Spruce Grove. For more information about the workshop, contact Pam Heinz (403) 967-3320 or the Alberta Provincial RCW Association office (403) 422-0922.

Contact:	*Cliff Munroe*	*Lynn Roberts*
	(403) 422-7249	*(403) 470-0627*

Hidden salinity causes crop losses

It is now possible to measure and map soil salinity in the field. A mapping process using the *EM 38 Electromagnetic Induction Salinity Meter* identifies low levels of salinity not previously recognized that can cause yield losses in sensitive crops. Salinity mapping along with yield monitoring and site specific agriculture makes it possible to determine the salinity tolerances of crops and yield losses in the field under a crop's growing conditions.

"In the past, soil salinity was determined by soil sampling and analysis," says Dr. Colin McKenzie, soil and water research agronomist, Crop Diversification Centre South (CDCS) Alberta

cont'd on page 2

This Week

Rural Crime Watch Week 1
Hidden salinity causes crop losses 1
1997 - a good year for Alberta farmers 2
Set the stage for newborn calf health 3
Alberta Agriculture Hall of Fame nominations 4
AgriFuture is pulsing 4
Briefs 5

Alberta
AGRICULTURE, FOOD AND
RURAL DEVELOPMENT

Agri-News™ is published weekly. Reprinting of articles is encouraged. Your comments and suggestions are welcome. A typewritten edition with wider line-spacing is available to media editors upon request. Editor – Lee Anne Palutke

AGRI-NEWS Alberta Agriculture, Food and Rural Development – Publishing Branch, Phone: (403) 427-2121

Agriculture, Food and Rural Development. "It was labor intensive, costly and didn't provide the information necessary to describe the variability of salinity within a field. The EM 38 Meter records conductivity readings proportionate to the amount of salts in the soil solution. Direct soil contact isn't required, so a number of readings can be taken at a lower cost than traditional sampling methods."

When the EM 38 Meter is towed behind an ATV, it's possible to rapidly and accurately map salinity. With global positioning methods, using two receivers, one travelling along with the EM 38 and a second receiver base station at a fixed location or radio tower, readings can be accurately positioned within a few centimetres.

"We've been using this technology at the CDCS to research salinity tolerance of crops being grown in Alberta," says McKenzie. "Salinity tolerances have seldom been determined by field experiments because of extreme variability of saline soils. Much of the data on salinity tolerances was obtained from experiments done in greenhouses at Riverside, California. These tolerances differ greatly from what a farmer encounters in the field. As a result, salinity tolerance values in literature may not be relevant in Alberta field conditions."

Findings show that some special and horticultural crops have low salinity tolerances. Soil with an electrical conductivity (EC) of 14 dS/m (deci Siemens/meter - a Siemens is a unit of electrical conductance) or above is easy to recognize since it is white for a part of the year and only grows a few salt tolerant weeds. Soils with an EC of eight to 14 dS/m are also usually recognized by the farmer. They show some white areas for part of the year and are difficult to till. These types of soils have increased numbers of salt tolerant weeds. Many crops grown in these soils have considerably reduced growth and yield. Soils with an EC or three to eight dS/m may cause major reductions in the growth of salt sensitive crops, and can cause some yield reduction in most other crops. Salinity of this level, often not recognized by the farmer, may only occur on portions of a field and is referred to as 'hidden salinity'. Many solonetzic soils in central and northern Alberta and many irrigated soils in southern Alberta have an EC in the three to eight range.

"Several field experiments on many of the special and horticultural crops grown in Alberta have been conducted by researchers at the CDCS," adds McKenzie. "Salinity tolerance and mortality rates for various species of ornamental trees and shrubs, as well as 28 species of forage and turf grasses have been identified. Work done with precision agriculture projects has helped identify salinity tolerances for barley and dry beans. This research shows the salinity tolerance of barley to be about half of that measured in controlled experiments."

Alberta producers should avoid planting salinity sensitive crops such as peas, beans, corn, lentils, Kentucky blue grass, strawberries and most coniferous trees in areas with hidden salinity. Salinity measurements can be made cheaply, rapidly and accurately with an EM 38 Metre. The measurements and data collected can be used to prepare detailed salinity maps.

Data obtained from direct field measures in southern Alberta on salinity tolerances of dry beans, barley, trees, shrubs and turf provide reliable information for management decisions by the agriculture, nursery and landscape industries.

Contact: *Dr. Colin McKenzie*
(403) 362-1347

1997 – a good year for Alberta farmers

"From a weather perspective, the big story was that both November and December had warm, dry conditions typical of what can be expected in Alberta when El Nino occurs," says Peter Dzikowski, agri-weather specialist with Alberta Agriculture, Food and Rural Development. "December, 1997 was the warmest and driest on record for several Alberta locations." The 1997 average annual temperature was one degree warmer than the average for the 1961 to 1990 period. The province averaged 474.2 mm of precipitation, 15.8 mm above the long term average. Averages are based on data recorded at 29 Environment Canada climate stations across Alberta.

"From a crop perspective, the well above normal June precipitation helped crops, especially with a very dry July and August," says Dzikowski. "Most regions received significant rains in May and June providing adequate moisture for crop growth. However, the below normal precipitation during the summer slowed crop growth and development. The warm sunny weather returned in August providing much needed heat for the late developing crops and good harvest weather."

For the province as a whole, the year began with temperatures below normal and ended with well above normal temperatures. In contrast to January, February was warm. March and April's below normal temperatures delayed the start of growing season.

"Precipitation was near normal for the first four months of 1997," says Dzikowski. "May and June temperatures were near normal and precipitation totals were above normal providing good moisture for crops. However, high soil moisture and cool temperatures delayed seeding operations and slowed crop growth and development. July, usually the second wettest month of the year, was very dry. Crops in southern and central regions showed signs of drought stress while excess moisture stressed crops in the Peace and northern central regions."

The cool, cloudy early summer raised concerns of late maturing crops and increased risk of frost damage reducing quality. In addition, severe summer weather caused damage to crops and property in parts of Alberta. There were reports of

cont'd on page 3

hail, damaging winds, funnel clouds and flooding in northeastern and southwestern Alberta.

June, typically the wettest month of the year, was the wettest month in the year with an average of 101.3 mm of rain, about 131 per cent of normal. A dry July raised concerns about too little moisture for crop development during the critical grain filling stage, however July's warm weather allowed crops to develop and mature rapidly.

The excess moisture in northeast and southwest Alberta slowed haying operations while the southern region reported the lowest precipitation totals for July and August, about 25 to 75 per cent of normal, causing drought stress in some dryland crops.

"Warm, sunny weather in August provided many areas the much needed heat for the late developing crops," says Dzikowski. "September's temperature was 2.2 degrees above normal and the average precipitation was near normal providing good harvest weather for most Alberta farmers.

The Peace region, however, reported almost double the average precipitation in September.

"The first widespread frost occurred between September 17 and 19," adds Dzikowski. "That's about one week later than the average first fall frost date for most agricultural regions of Alberta. Temperatures dropped to between 0 and -4.3 degrees. The frost was followed by warm, dry weather until the end of the month providing ideal harvest weather."

Growing degree day totals for April 1 to September 29 were two weeks ahead in the northeast northwest and Peace regions, one week ahead in the southern region and near normal in the central region.

October was cool in most of Alberta, slowing harvest operations and fall field work.

Both November and December had warm, dry conditions typical of what can be expected in Alberta when El Nino occurs. December's temperature departures from normal were double the departure reported for November.

December, 1997 was the warmest and driest on record for several Alberta locations. Most Alberta locations reported monthly average temperatures ranging from four to 12 degrees above normal.

"In many parts of the province conditions differed quite a bit from what the provincial averages show," says Dzikowski. "For example, the annual total precipitation at Bow Island was 167.1 mm, 51 per cent of the long term average. This was typical for much of southern Alberta and the northern Peace region.

"In contrast, Peace River received more than two times that amount, 548.3 mm, 142 per cent of its 1961 to 1990 average. Lacombe CDA reported the greatest precipitation departure, receiving 806.4 mm, 184 per cent of it's long term average."

You can find more details on the Ropin' The Web Internet site at: **http:\\www.agric.gov.ab.ca\climate**

Contact Peter Dzikowski
(403) 427-3594

Set the stage for newborn calf health

Even if calving doesn't start until mid-March, it's time to start thinking about calf health. Managing for calf health and vigor is beneficial and necessary.

"The management of a cow herd during the 60 days before and after calving is the most critical of the entire year," says Brian Koberstein, beef specialist with Alberta Agriculture, Food and Rural Development. "The condition of a beef cow at calving, both in terms of her 'fatness' and her immunological status, is crucial."

The two months before and after calving set the stage for a cow's productivity, ability to cycle and rebreed. As well, it is an extremely important time for calf health and vigor.

It is essential to evaluate the situation early enough to be in a position to react if required. Avoiding problems such as scours, poor conception and lower pregnancy rates are a few conditions that need to be considered when working toward reducing and eliminating production shortfalls.

"If scours were a problem last year, focus on why," says Koberstein. "Immunity status, colostrum quality and volume and hygiene can all play a part in this problem. An early visit with a veterinarian, beef specialist or nutritionist to discuss how vaccinations, increased vitamin E levels and cow body condition factor into a planned calving strategy is a wise step to take."

If conception rates were unacceptable and is wasn't a bull related problem, the causes need to be determined and dealt with now. As a matter of good herd management, at this critical period in the biological cycle, it's time to evaluate overall cow herd status.

Contact. Brian Koberstein
(403) 361-1240

Alberta Agriculture Hall of Fame nominations

Nominations for the 1998 Alberta Agriculture Hall of Fame are now being accepted.

"There are thousands of individuals who dedicate their lives to the agriculture industry in this province, from the farmer in the field to people in research, processing and marketing," said Ed Stelmach, Minister of Alberta Agriculture, Food and Rural Development. "But there are those who have made such a significant contribution that their achievements cannot be overlooked. The Hall of Fame recognizes these individuals."

Being inducted into the Hall of Fame is the highest honour Alberta Agriculture bestows on those who have gained wide recognition for their successful endeavours and achieved outstanding careers in agriculture, food or rural development. Any Albertan who has made an exceptional contribution at the local, provincial, national or international agriculture level is eligible for nomination.

Since its inception in 1951, the Hall of Fame has honoured 102 men and women who exemplify agricultural leadership and accomplishment. Those chosen to be inducted into the Hall of Fame this year will be honoured October 16, 1998, during Agriculture and Food Week.

Nomination forms are available at any Agriculture district office or by contacting Alberta Agriculture, Food and Rural Development, Communications Division, J.G. O'Donoghue Building, 7000 - 113 Street, Edmonton AB T6H 5T6 or by phoning (403) 427-2127.

All nomination forms must be returned by March 15, 1998

Contact: *Bard Haddrell*
(403) 427-2127

AgriFuture is pulsing

On February 4 to 6, 1998, a number of agricultural associations are collaborating on one major event at the Westerner Park in Red Deer.

"AgriFuture 1998 brings together farm groups and the agriculture industry at one venue," says Doug Halberg, president of Alberta Pulse Growers Commission. "Six producers' groups, representing thousands of farmers will come together to hold their annual meetings at one place and at the same event. The industry is very excited about this event."

Members of the six groups involved, Alberta Canola Commission, Alberta Reduced Tillage, Alberta Conservation Tillage Society, Soil Conservation Canada, Alberta Pulse Growers' Commission and Alberta Oat Producers, will have the opportunity to network with other groups while attending a number of sessions on a wide range of topics.

The theme of the three-day event is ***Fields of the Future***. Session topics include: weed control in transgenic canola; putting together a direct seeding system; benefits of pulse crops in rotations; fall seeded canola; pulse crop harvest management; and more.

"Member response to the event has been excellent," adds Halberg. "Westerner Park will be a very interesting place, pulsing with activity during the first week of February."

Registration fee is $150/single or $220/farm pair. For further information on AgriFuture 1998, contact Pat Kennedy, event marketing director, (403) 342-2757, fax: (403) 340-0691.

Contact: *Doug Halberg* *Janette McDonald Adam*
(403) 889-2208 *(403) 986-9398*

Agri-News Briefs

Basic pruning workshops

Two-day workshops, suited to beginning arborists, landscape maintenance contractors, municipal employees or Albertans interested in tree and shrub pruning are being offered through Landscape Alberta Nursery Trades Association (LANTA). The workshops are scheduled for the Alberta Vocational College, Calgary, February 12 and 13, 1998; Crop Diversification Centre North, Edmonton, March 12 and 13, 1998; and, Muskoseepi Park, Grande Prairie, April 7 and 8, 1998. Instructors Brendan Casement - agroforestry and horticultural specialist, Brian Breneman - horticulture specialist and Thean Pheh - ornamental research technologist, will cover topics on plant structure, insects and diseases of trees and shrubs and pruning. Workshop fees are $119 plus GST (LANTA members $99 plus GST). The fee includes all instruction, workbook, certificate and coffee breaks. Attendees must bring their own basic pruning tools. For more information, contact LANTA (403) 489-1991; toll free: 1-800-378-3198, fax: (403) 444-2152.

Future Food

The Canadian Council of Grocery Distributors (CCGD) is holding the 1998 Western Regional Conference on January 29 and 30 at the Coast Plaza Hotel, Calgary. The conference provides market, retail and trend information to the grocery industry. Speakers from across Canada will conduct sessions on topics that include: tomorrow's food choice; biotechnology for a hungry planet; meal solutions; retailing in the new millennium and future food - new products and services. Registration fee is $225 (includes GST). For further information, contact Bryan Walton, vice president western region, CCGD, (403) 250-6608.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51423 9868

AGRI-NEWS

February 2, 1998

Minister to develop regulations on intensive livestock operations

Development of a new regulatory approach to intensive livestock operations in Alberta is underway.

"I have instructed my staff within the Ministry to develop a discussion paper on what kinds of options we should consider," said Ed Stelmach, Minister of Alberta Agriculture, Food and Rural Development. "I also want to have a full and frank discussion on the implications of all the options under consideration."

Once the discussion paper is prepared, the Department will consult with stakeholders and the public. Following these consultations, a draft proposal will be presented to the Standing Policy Committee on Agriculture, Food and Rural Development. The discussion paper should be available by the end of March. Details on the consultation process will be announced at that time.

"One of the recommendations from the Growth Summit was to consider greater provincial involvement in permitting decisions or the appeal process," said Stelmach. "The status quo is a blend of municipal and provincial responsibilities. In most cases that works well but sometimes the status quo isn't good enough. What we're searching for here is an even better system."

The Minister is also reviewing the findings of a study called *Agricultural Impacts on Water Quality in Alberta – an Initial Assessment*, released on January 23, 1998 by the Canada-Alberta Environmentally Sustainable Agriculture (CAESA) Water Quality Committee.

"I'd like to congratulate the committee members for their work," Stelmach commented. "There are still a lot of questions to be answered, but the Government of Alberta and our department are committed to doing whatever is necessary to help protect the quality of water in this province."

Alberta Agriculture takes a lead role in working with industry to ensure environmental sustainability in the agriculture industry and was a key partner in the CAESA Water Quality report along with Alberta Environmental Protection, Alberta Health, Agriculture and Agri-Food Canada and Environment Canada.

cont'd on page 2

This Week

Minister to develop regulations on intensive livestock operations 1

Alberta environmentally sustainable agriculture program 2

Top 10 Alberta agriculture facts 3

Manure happens – make the most of it 4

Best manure management practices 4

Farm transfer education fairs 5

500 attend annual equine conference 6

Briefs 7

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT
Publishing Branch

Agri-News™ is published weekly. Reprinting of articles is encouraged. Your comments and suggestions are welcome. A typewritten edition with wider line-spacing is available to media editors upon request. Editor - Lee Anne Palutke

The study identified several key areas needing more work: education, enforcement, research and monitoring. Actions that Alberta Agriculture and industry have taken include:

- forming the Alberta Environmentally Sustainable Agriculture (AESA) Council as an industry-led group to promote environmentally friendly farming practices and encourage a pro-active approach by industry to environmental challenges;
- providing $5 million per year through the AESA program. This money represents a doubling of the provincial government's investment over the previous fiscal year, making up the shortfall after the federal government discontinued funding under the *Green Plan*. Under the AESA program, producers and processors are working together to reduce the industry's impact on the environment;
- initiating a $150,000 Environmental Impact Study to ensure growth in the agriculture sector is responsible and sustainable;
- conducting technology transfer and education efforts to increase producers' knowledge of better environmental management practices;
- creating a livestock development and expansion team to conduct research on intensive livestock operations and publishing a developer's guide for establishing and managing livestock operations;
- updating the *Code of Practice for the Safe and Economic Handling of Animal Manures*, to reflect current practices being used in the field by Alberta Agriculture site engineers;
- Alberta Agriculture Research Institute (AARI) sponsoring a number of research projects related to the management of manure;
- more than 200 agricultural staff around the province, including engineers, agronomists and experts in livestock and crop production, farm business management and soil conservation specialists are available to assist farmers and municipalities in siting, design and overall management practices.

Stelmach congratulated industry for taking a pro-active role in addressing environmental concerns in the intensive livestock sector. For example, the Alberta Cattle Commission (ACC) is establishing a water quality task force to look at ways the industry can be more pro-active in protecting the province's water supply. As well, the ACC received approval of 23 research projects, totalling $7 million, under the Canada-Alberta Beef Industry Development Fund.

The Alberta Pork Producers Development Corporation administers a similar industry development fund. Under this fund, research to address environmental issues including manure, odour and water are priorities.

Copies of the CAESA Water Quality report are available from the Publications Office of Alberta Agriculture, 7000 - 113 Street, Edmonton, AB T6H 5T6, or by phone - (403)427-0391.

Contact: *Ron Glen – Executive Assistant to the Minister of Agriculture, Food and Rural Development*
(403)427-2137

Ray Bassett – Assistant Deputy Minister
Alberta Agriculture, Food and Rural Development
(403)427-1957

Alberta environmentally sustainable agriculture program

In April 1997, Ed Stelmach, the Minister of Agriculture, Food and Rural Development, announced the formation of a new, long-term environmental program for the agri-food industry called the Alberta Environmentally Sustainable Agriculture (AESA) Program. The AESA program replaced the Canada-Alberta Environmentally Sustainable Agriculture (CAESA) Agreement, a five-year federal-provincial agreement that concluded in March 1997.

At that time, Stelmach said the Government of Alberta recognizes the importance of continuing to find ways to make the agri-food industry more environmentally sustainable. One of the ways to do that is to ensure the industry has the best science and information available to protect natural resources.

The AESA program provides funding for research, extension and monitoring. Funding is available to rural municipalities, agriculture organizations, agricultural processors, environmental groups and aboriginal organizations for education and demonstration activities.

The AESA program is made up of the following four components:

- transfer of technology to farmers and ranchers
- technology development and demonstration to processors
- monitoring changes to soil and water quality
- research to find new technologies and management practices

Funding for the program is $5 million per year. This commitment represents a doubling of provincial investment in dedicated environmentally-sustainable agriculture programming. It also allows for a meaningful program to be continued into the future now that federal cost-sharing is no longer available. The program is directed by a council composed of a cross-section of industry and stakeholder representatives. A list of the members of the AESA Council is attached. The Council was appointed by the Minister from

Cont'd on page 3

nominations received from industry and stakeholder organizations. It is responsible for ensuring that the program meets the needs of the industry in its search for improved environmental management.

Members of the AESA Council

Bruce Beattie, Chair
Sundre

Roger Bryan
Camrose

Ken Dietzler
Lacombe

Doug Hall
Airdrie

Bernard Kotelko
Vegreville

Colin Kure
Innisfail

Gerry Lewis
Edmonton

Glenn Logan
Lomond

David Oseen
Turin

Terry Rachuk
Nisku

Don Sawyer
Condor

Ron Svanes
Carmangay

Donna Tingley
Edmonton

Harold Unruh
Vauxhall

Charles Westra
Gibbons

Ben Boettcher
Wanham

Brian Colgan
Edmonton

Don Fluney
Dewberry

John Kolk
Picture Butte

Fred Kraft
Edmonton

Renald Lamoureux
Fort Saskatchewan

Gary Lilge
Valleyview

Gary Nason
Calgary

John Petruic
Calgary

Charles Rypien
Athabasca

Bill Stewart
Hairy Hill

Jack Swainson
Red Deer

Clifford Tuininga
Neerlandia

Nico Van der Giessen
Bezanson

Top 10 Alberta agriculture facts

Agriculture in Alberta contributes considerably to the provincial economy. The important facts and figures of agriculture and value-added agri-food products in the province are often, unfortunately, not known by most Albertans.

The following 10 facts answer a few of the questions Albertans may have about Alberta's agriculture industry.

1. The value of farm cash receipts gives a good picture of how Alberta's farmers and ranchers are doing. The value is updated by Alberta Agriculture, Food and Rural Development's statistics and production economics branch throughout the year. The value of farm cash receipts for 1996 totalled $6.39 billion. That's an increase of 8.5 per cent from 1995's total of $5.89 billion. Alberta ranks second in Canada for farm cash receipts, just behind Ontario at$6.61 billion and ahead of Saskatchewan at $5.44 billion.
2. The processing industry also had a record breaking year in 1996. Food and beverage shipments for 1996 were at an all-time high of $6.84 billion. That's an eight per cent increase from 1995 ($6.33 billion).
3. The agriculture industry in Alberta is growing at a rate that out-strips most of the other major industries in the province. Alberta's potential for continued growth is very encouraging.
4. The industry needs help identifying new value-added market opportunities. Alberta Agriculture, Food and Rural Development is prepared to help Alberta producers in this area. The department recently announced a $35 million investment in a new value-added corporation.
5. Agriculture creates jobs. Alberta Agriculture has estimated that industry growth will create close to 100,000 new jobs in both the primary and processing sectors over the next seven years.
6. Alberta Treasury statistics show that agriculture creates more jobs per investment dollar than either energy or education. For every $100,000 invested in agriculture and related industries, 2.6 jobs are created.
7. Agriculture is the third largest employer in the province. One in three Albertans is employed either directly or indirectly in the agriculture industry.
8. Alberta has more cattle than any other province in Canada. On July 1, 1996, there were more than five million head of cattle in the province. Alberta also has Canada's third largest hog population.
9. Alberta began a new-look crop insurance program in 1997. On average, farmers will pay 25 per cent less for their premiums. The federal and provincial governments have assumed a larger share of the premium and risk for basic coverage.

cont'd on page 4

10. Alberta was expected to lead the country in economic growth in 1997. The provincial economy was forecast to grow by 3.6 per cent in 1997, compared with 3.0 per cent for Canada as a whole.

These are just 10 facts about the agriculture industry and agriculture growth in the province. For more information, contact the statistics and production economics branch of Alberta Agriculture, Food and Rural Development at (403)427-4011.

Contact: Michael Adam
(403)422-2886

Manure happens – make the most of it

Livestock manure is receiving increasing public attention. Ground and surface water quality degradation from agricultural sources is regarded as an environmental concern. Proper management is being closely looked at to determine handling, application timing and application rates.

"There are many management factors that must be considered when planning and dealing with manure disposal and use," says Dr. Ross McKenzie, research scientist – soil fertility with Alberta Agriculture, Food and Rural Development. "Excessive applications, applied repeatedly over a number of years is an example of mismanagement that eventually results in nutrient overloading in soil. Nutrient overloading, poor handling or poor timing of manure applications can lead to water quality problems. Proper management practices can be used to use manure as a valuable nutrient resource rather than as a contaminant and waste."

Manure is an excellent 'organic' fertilizer containing nitrogen (N), phosphorus (P), potassium (K) and many other nutrients. It can physically benefit the soil, adding organic matter which improves soil tilth and structure. Because it is organic however, there is a perception that it can't be harmful to soils or the environment. While there's no question that proper amounts of manure added to soil can be beneficial, too much can lead to problems.

"To prevent problems from developing, intensive livestock operators must use best manure management practices (BMP)," says McKenzie. "It is very important to remember that BMP will vary from farm to farm, depending on the climate zone the farm is located in, the type and number of animals in confinement, the total amount of manure produced and how the manure is handled, stored and applied."

Other factors that must be considered are the amount of land available to apply the manure, soil types on the farm, types of crops grown and crop yield potential. BMP must be developed specifically for each farm.

"Producers must take a pro-active approach to manure management to ensure both the sustainability of the farm and the environment," adds McKenzie. "Following a step by step approach is essential in planning best manure management practices for each farm in Alberta."

Contact: Dr. Ross McKenzie
(403)381-5126

Best manure management practices

Intensive livestock operators must use best manure management practices (BMP) to prevent problems from developing. A step by step approach, specifically developed to the individual operation, location and soil composition, is essential.

"The place to start planning BMP is to determine how much total manure is produced by the livestock operation," says Dr. Ross McKenzie, research scientist - soil fertility with Alberta Agriculture, Food and Rural Development. "The Alberta Agriculture booklet ***Code of Practice***, provides general estimates of manure produced. However, amounts produced vary considerably depending on methods of storage and handling. The most accurate way is to weigh every truckload of manure that is removed."

The next factor that needs attention is ensuring a sustainable on-farm location to store manure. In the case of solid manure, storage is needed for up to six months while waiting for appropriate times to apply the manure to fields.

"The storage site must be on soil with very low permeability to prevent contaminants from seeping into the subsoil and possibly the ground water," says McKenzie. "It's very important to ensure leachate from manure piles can't leave the storage area in surface runoff during heavy rain or rapid snow melt."

In the case of liquid manure storage, seepage from the containment area must be prevented. Containment areas can be lined using flexible membranes or other types of impermeable material. In all cases, surface water runoff must be diverted away from manure storage areas.

"Where to apply the manure and at what rates to apply are the two factors that require the greatest attention," says McKenzie. "Application involves identifying the fields where manure can be applied, determining the acreage of each field and soil testing each field separately. In determining where and how much to apply, soil sampling to a depth of two feet (90 cm) must be analysed for nitrate-nitrogen, phosphorus, potassium, sulphate-sulphur, boron, copper, iron, manganese, zinc, pH and electrical conductivity. Twenty random sampling sites across each field are needed to make up a composite soil

Cont'd on page 5

sample. Each field should be analysed each year, either in late fall or early spring. This information, needed to identify which nutrients are deficient in each field, is the planning basis that determines how much of each nutrient should be added to the soil to supply adequate levels for crop growth

In addition, soil sampling to a depth of four feet (1.2 metres) is recommended every few years to ensure potential nutrient leaching is not developing. If a problem is recognized early, it can be dealt with before it becomes a serious concern.

"Information must be gathered and put together to develop a manure management plan," adds McKenzie. "Alberta Agriculture, Food and Rural Development has developed a set of calculation sheets to help producers work through the process. These worksheets are excellent in helping develop a BMP. They help producers understand how much manure can be applied to different crops and fields based on crop removal rates in different soil and climate areas. It may seem like a daunting exercise, but it is essential in planning a manure use program."

In situations where intensive livestock producers don't have a large enough land base to spread manure, there is an opportunity to work with neighbors. Commercial fertilizer prices have dramatically increased over the past several years One alternative is for neighbors close to a feedlot or intensive livestock operation to use manure to organically beat the rising cost of commercial fertilizers.

The booklet, ***Code of Practice*** can be purchased for $10, plus GST, from Alberta Agriculture district offices and the Publications Office, 7000 - 113 Street, Edmonton, AB T6H 5T6, or by calling ttoll free 1-800-292-5697 (please add $2, plus GST, for shipping and handling).

Contact: Dr. Ross McKenzie
(403)381-5126

Farm transfer education fairs

To launch the new resource guide ***Growing the Farm Business Together***, a series of five Farm Transfer Education Fairs is planned to introduce farm families to the outlined six-step planning process.

"The farm transfer fairs include resource displays and speakers to increase awareness of the process of transferring labor, management and ownership of a farm business from one generation to the next," explains Janice McGregor, rural development specialist with Alberta Agriculture, Food and Rural Development.

Speakers scheduled throughout the day focus on farm transfer issues and provide practical solutions and options to consider in transfer planning. These experts will be available to answer individual questions and suggest resources to assist in designing and implementing farm transfer.

Garry Bradshaw, management specialist with farm business management branch, Alberta Agriculture, Food and Rural Development, will introduce the six-step transfer process says McGregor. "Bradshaw challenges farm families to openly communicate their individual and family goals. He will explain why discussing land transfers and farm machinery ownership and spending some time thinking about how the business will train and integrate new management talent, are important factors in the transfer process."

Ted Ford, Alberta Treasury Branches, handles a session on *Affordable, Desirable and Profitable*. These three key issues regarding the financial health of the farm business need to be addressed to ensure the retiring generation can afford to retire while leaving enough to operate a viable farm business

"Taxation issues, always a popular topic, will be covered by Merle Good, tax/law/business arrangements specialist with the agricultural business management branch, Alberta Agriculture, Food and Rural Development. "Good will show how taxation can affect farm transfer decisions. Rollovers, capital gains and inventory concerns will also be addressed."

Business arrangements will be covered by a panel of experts including a lawyer, accountant and financial planner. It is important to seek feedback from a wide variety of experts in developing and implementing your plan

Dates and locations for the fairs is listed below. Fairs will be open from 1:00 PM to 8:00 p.m. in each location.

February 10, 1998	Westlock Inn, Westlock
February 11, 1998	Stony Motor Inn, Stony Plain
February 12, 1998	Barrhead Inn, Barrhead
February 17, 1998	Camrose Regional Exhibition, Camrose
February 18, 1998	Killam Legion, Killiam

There is no charge to attend the fairs, but please pre-register with an Alberta Agriculture office.

For further information regarding the scheduling of individual speakers, contact Janice McGregor. Copies of the free resource guide ***Growing the Farm Together*** are available at Alberta Agriculture offices and the Alberta Agriculture's Publications Office, 7000 - 113 Street, Edmonton, AB T6H 5T6

Contact: Janice McGregor
(403)939-4351

500 attend annual equine conference

On January 9 and 10, 1998, 500 horse enthusiasts converged on Red Deer to attend the 16th annual Horse Breeders and Owners Conference. *Only in Alberta*, was the most often heard comment describing this well planned, highly informative event.

Internationally respected speakers covered a range of topics dealing with nutrition, exercise, conformation, dental health, reproduction, the equine market, networking and horse alliance groups, equipment and tack – and Albertans involved in the growing horse industry soaked up every bit of the information.

"I'm here to learn, socialize and meet other people in the industry," said first time conference attendee, Roman Kneblewski or White Eagle Ranch Inc., Caroline. "It's important to keep up with new research and the direction this industry is headed."

"The sessions on breeding and reproduction are what interest me the most," noted Dennis Dodds of Thunder Valley Farms, Black Diamond. "I've imported some good stock and want to produce even better horses. Education and research are certainly part of reaching that goal. Breeding horses and being involved in the sport and industry aren't fads, they're a way of life."

The conference, coordinated by the horse industry section of Alberta Agriculture, Food and Rural Development, receives critical acclaim each year from attendees as well as invited speakers and presenters. "This would never happen in Texas," said Ken Carson, business manager of Valor Farm, Pilot Point, TX, and member of the Texas Thoroughbred Breeders Association. "It's a wonderful opportunity for people in Alberta to have an event like this to go to."

Conference organizers, Les Burwash, head of equine programs, Bob Coleman horse specialist, and Doug Milligan, head of the pork, poultry & horse branch, all with Alberta Agriculture, Food and Rural Development, spend considerable time with representatives from breed associations to make sure the sessions cover issues and topics that concern and interest Alberta horse breeders and owners. The invited speakers are always experts in their chosen fields, recognized internationally by the horse industry. Overall, the quality of presentations were the best that have been given at the conference.

"This is our fourth conference," said Neil and Mary Duggan of Khaarga Arabians, Gwynne. "Each time, you can't help but learn at this conference. The information provided is really good and of real value. The sessions on maintenance, nutrition and care were excellent. We especially like the great variety of speakers and topics."

This annual conference is supported by a number of sponsors: Alberta Treasury Branch, Canadian Dehydrators Association, Champion Feed Services Ltd., Diamond V Mills Inc., Horse Publications Group, the Jones Boys Saddlery and Western Wear, Merial Canada (Equalan), United Farmers of Alberta, A.E.F. Western Riding Coaches of Alberta, Wild Rose Equine Ranching Association (NAERIC member), the Alberta Society for the Prevention of Cruelty to Animals and Alberta Agriculture, Food and Rural Development.

"We are grateful to our sponsors for their help in making the conference such a success," says Burwash. "For the past five years, a donation from conference proceeds has been made to the Equine Health Research Fund at the Western College of Veterinary Medicine, Saskatoon. The college is a leader in equine research. Their research findings are always available and of value to all horse owners and breeders. Again this year, because of the tremendous response, we'll be sending a donation to support the college and help fund equine research.

The Horse Owners and Breeders Conference is held each year in January. It has become known as one the premier horse conferences in North America. Several speakers are already confirmed for next year's event on January 8 - 10, 1999.

Contact:	*Les Burwash*	*Bob Coleman*
	(403)948-8532	*(403)427-5096*

Agri-News Briefs

Alberta Quality Awards

Alberta Quality Awards promote and recognize Alberta organizations for their commitment to quality, dedication to continuous improvement and achievements in organizational performance. The program is open to Alberta organizations engaged in manufacturing and service (private sector), education, health care, government (public sector) or not-for-profit enterprises. **Deadline for submissions to the Alberta Quality Awards Program for 1998 is March 16.** For more information about this award program, contact Kari Taylor (403)423-6878; toll free: 1-800-224-0848; fax: (403)426-1509; e-mail: **kari_taylor@the-alliance.com**

Alberta Horticulture Congress

At the 1997 Alberta Horticultural Congress held in November in Edmonton, the horticulture industry was recognized as a significant contributor to the Alberta economy. Keynote speaker, Brian Smith, Woodlea Nurseries, Southampton, England, highlighted the conference by sharing his marketing strategies with attendees. Plans for the 1998 combined trade show and Congress are well underway. The event will be held in Edmonton at the Mayfield Inn and Trade Centre on November 12 and 13, 1998.

Nursery growers seminar

Landscape Alberta Nursery Trades Association (LANTA) is holding a Nursery Growers Seminar on February 13 and 14, 1998 at the Crossroads Hotel in Calgary. Topics ranging from field grown fertility, nursery efficiency to industry trends and what's new in roses, perennials and woody plants will be covered. Speakers include: John Byland, general manager of Byland's Nurseries; Mario Lanthier, manager with Crop Health; Rick Durand, owner of Prairie Shade Consulting Service; and, Jim Stolzenburg, active member of the Minnesota Nursery & Landscape Association. For further information, contact LANTA at (403)489-1991, Edmonton or toll free 1-800-378-3198.

Beginner sheep production course

Olds College is offering an introductory course on the sheep industry on February 7 and 8, 1998. The course consists of one and one-half days of classroom instruction and a half day in the Olds College Sheep Enterprise. Students have the opportunity to get hands-on, how-to experience in vaccinating, drenching ewes, foot trimming, ear-tagging, docking tails and stomach tubing lambs. Classroom instruction covers basic economics, sheep breeds, basic sheep nutrition, predators, overview of sheep diseases and lambing supplies and procedures. For more information or to register, contact Joanne Letourneau (403)556-8377, Olds College

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 7013

CANADIANA

MAR 20 1998

AGRI-NEWS

February 9, 1998

New crops and new diseases

Crop production trends in the prairies have moved to diversification and increased production of exotic herbs, spices, essential oil and medicinal plants. Along with these new crops can come diseases that have rarely, if ever, been seen on the prairies before.

"The plant pathology team at Crop Diversification Centre-South, (CDCS) are discovering new diseases and documenting their incidence on the prairies," says Dr. Kan Fa Chang, plant pathologist with Alberta Agriculture, Food and Rural Development, CDCS Brooks. "Plant pathologists spend part of their time looking at diseased plants, isolating the pathogens believed to be responsible, then introducing the pathogen to a healthy plant like the one the disease was originally found on in order to prove it is the true cause of the problem. The other part of their time is spent searching for controls, whether chemical, biological or cultural, for diseases. The pathology group works with many of the horticultural and specialty crops in the province."

New diseases have been found at the CDCS. In August 1996, Chang reported Sclerotinia stem rot on a crop called stevia for the first time. Stevia, an annual plant that comes from Paraguay, is used as a low calorie sweetener in South East Asia and South America. It is 100-300 times sweeter than regular sugar (sucrose). The stem rot disease was discovered in the research plots at CDCS and until that time it had not been described on the prairies before.

"The second host that the stem rot was found on was purple coneflower (echinacea)," adds Chang. "Echinacea is a perennial herb that is grown as an ornamental and also has uses as a medicinal herb. Once again the disease had not been described before but showed up in the research plots at CDCS in 1996. In the spring of 1997, stem rot occurred in echinacea fields at Vernon BC. Stem rot could impact the production of this crop in both the field and greenhouse."

Also in the spring of 1997 at Vernon BC, botrytis blight was discovered on coneflowers. Chang isolated the pathogen from affected plants and identified it. This disease also could have significant impact on the productivity of this crop

Chang, along with Dr. Sheau-Fang Hwang, Alberta Research Council, Vegreville, has done extensive work studying the yellows diseases of caraway, calendula, echinacea, monarda and valerian. Yellows diseases are caused by microorganisms called phytoplasmas. These are smaller than bacteria, but

Cont'd on page 2

This Week

New crops and new diseases 1

Annual ryegrass pasture 2

Trails to 2000, AARI 1998 Farming for the Future conference 2

New scholarship fund seeks 4-H applications 2

No spring fire surprises 3

There's gold in them th'ar manure piles 4

When and how to apply manure 4

Trucking – a critical step in getting product to market 5

Briefs 6

Agri-News™ is published weekly. Reprinting of articles is encouraged. Your comments and suggestions are welcome. A typewritten edition with wider line-spacing is available to media editors upon request. Editor – Lee Anne Palutke

larger than viruses and are responsible for over 200 diseases in a variety of plants. The best known yellows disease is aster yellows, which attacks vegetables such as carrots.

These organisms survive and reproduce in plant tissue, and are transmitted by insects, like leafhoppers, which feed on the phloem of the plant.

"Management of yellows includes focusing on both the pathogen and the vector," says Chang. "This includes monitoring for leafhoppers and controlling their numbers when they begin to increase. Producers should also control perennial weeds and avoid planting susceptible crops close to fields of other susceptible crops."

Contact: Dr. Kan Fa Chang
(403)362-1334

Annual ryegrass pasture

Annual crops can be a valuable part of the regular farm or ranch forage program. Historically, cereal crops have been used as the primary source of annual pasture but in the past few years, annual ryegrass has received a lot of attention as an alternative source of annual pasture.

"In 1997, a number of on-farm demonstrations were conducted in southern Alberta to evaluate the potential for this grass for summer grazing and as a source of stockpiled fall grazing," says Gordon Hutton, crop specialist - forages with Alberta Agriculture, Food and Rural Development. "The results from these projects indicate that annual ryegrass can provide high quality forage from early summer through to November."

The trials also indicated that stocking rates and cattle live weight gains per acre are very dependent on seasonal moisture.

Annual ryegrass is a very shallow-rooted grass and is best suited to irrigation or cropping areas that receive 10 to 14 inches of rainfall though the growing season.

"Under good moisture conditions, live weight gains obtained in 1997 ranged from 440 lbs per acre for summer pasture to an estimated 100 pounds per acre when used as stockpiled fall pasture," adds Hutton. "Due to the high forage quality, this pasture program is well suited for use with yearlings or weaned calves."

Costs for seeding this crop range from $45 to $70 per acre.

Further information on the results of the ryegrass on-farm projects is available by contacting Hutton at (403)948-8502.

Contact: Gordon Hutton
(403)948-8502

Trails to 2000 AARI 1998 Farming for the Future conference

The Alberta Agricultural Research Institute hosts the **Farming for the Future** conference on March 12, 1998, at the Medicine Hat Lodge in Medicine Hat.

"At the conference, the results of research and demonstration projects supported by AARI are presented," says conference coordinator Joan Unger of Alberta Agriculture, Food and Rural Development. "Topics being covered are soil and water management, crop production, livestock production and value added processing. The presentations are of direct interest to producers, processors, specialists and researchers. Information about the many AARI programs will also be available."

A multi-media presentation on AARI programs will open the one-day conference, followed by speakers covering various projects from the On-Farm Demonstration Program. Four concurrent sessions on resource conservation, crop, livestock and value-added research results are presented in the afternoon. Each of the concurrent sessions will run twice.

"The conference concludes with a banquet at which the Honorable Ed Stelmach, Minister of Agriculture, Food and Rural Development, is the featured speaker," adds Unger. "Displays complementing the day's topics will help showcase the important role research plays in the growth of the agriculture and food industry."

Conference registration fee is $60.00. It covers attendance of all sessions, refreshments, luncheon, banquet and published proceedings.

Producers, processors, specialists and researchers are especially invited to take part in this unique opportunity to learn about the latest advances in research and technology.

Contact: Joan Unger
(403)422-6555
email: ***unger@agric.gov.ab.ca***

New scholarship fund seeks 4-H applications

Fifty new $1,000 IVOMEC® scholarships have been developed from money granted by Merial Canada Inc. Additional funds will also be donated by Merial Canada Inc. to support 4-H programming.

"To qualify for an IVOMEC® 4-H Scholarship, 4-H members must meet eligibility criteria and complete an application form available from their regional 4-H specialist," says Mike Nowosad of the Canadian 4-H Council.

Cont'd on page 3

All applications must be accompanied by a 400-750 word essay in either English or French on the following topic:

> Since the beginning of this century, a progression of ingenious farming methods have advanced the Canadian cattle industry and agriculture in general. As we embark on the 21st century, what innovations can you imagine that could further advance the cattle industry or agriculture in general?

"We are very honored to be able to contribute to 4-H youth education through the support of our customers," says Jean-Claude Noel, associate director of marketing for Merial Canada Inc. "Our intent in creating the IVOMEC® 4-H scholarships is to foster and support a tradition of ingenuity in 4-H youth."

Eligibility criteria:

1. Applicants must be 16 years of age by January 31, 1998.
2. Applicants must have been 4-H members for at least two years, and have been registered as 4-H members within the last five years.
3. Entrants are eligible whether or not they have participated in another 4-H national or international awards program.
4. Applicants are required to submit a completed application form, signed by a local 4-H leader or regional 4-H specialist.
5. Applicants must submit an essay with their completed application form. Essays will be judged for style, subject knowledge, originality, quality and interpretation of research.
6. Winners must use the funds within four years from receipt of the award for attendance at a university, college or other post-secondary institution while studying an agriculture related course. Funding may be used for tuition, books and/or lodging.

Applications from 4-H members across Canada are being accepted from now until March 31, 1998 for the $1,000 IVOMEC® 4-H Scholarships. Winners are announced in June, 1998. Send completed applications form along with the essay to:

CANADIAN 4-H COUNCIL
1690 Woodward Dr. Suite 208
Ottawa, ON K2C 3R8
Attention: Judy Gallant, program manager
Tel: (613) 723-4444 Fax: (613) 723-0745

Application forms will also be distributed to participating veterinary clinics and farm supply stores. For more information, please contact your regional 4-H specialist or the provincial 4-H office.

Contact: *Mike Nowosad*
Canadian 4-H Council
(613)723-4444

Carol Sullivan
(403)422-4H4H

No spring fire surprises

Spring is coming and it's important to finish off those winter tasks so the new season doesn't hold any nasty surprises. The fall of 1997 was extremely dry and there is the possibility of a dry spring and of high fire hazard

"If clearing land and pile burning was done last fall, now is the time to check windrows or brush piles to see if they are still burning," says Bill Bereska, manager, Wildfire and Air Operations with Alberta Environmental Protection. "With a dry fall, there's a good chance of hold-over fires either in the piles themselves or possibly in the ground. The best time to check if they are still burning is on a cold morning with no wind Smoke should be visible if there is still fire burning."

Another good sign indicating still burning piles is patches of melted snow around or near the piles. With spring approaching, adequate cleared areas around still burning windrows and brush piles is an important safety feature

"Repiling the windrows or brush piles to complete the burn may be required," says Bereska. "To ensure the burn is completely out, spread any remaining debris over the snow to prevent hold over fires. Remember that as of April 1, 1998, burning permits are required."

If you live in the Forest Protection Area of Alberta, notify the local district office with the legal description of the burn area and discuss your concern of possible holdover fires with the Land and Forest Service (LFS). Staff with LFS may choose to have the area scanned after the snow is gone using infrared technology to detect any fires still burning. If any are found, the landowner is notified.

To ensure a fire-free spring on your property, follow these simple rules:

- inspect the exterior of rural residences at least once a year, preferably before summer;
- maintain a fuel-free area around homes by removing flammable plants from beside the house and clearing nearby ground vegetation, stumps, rotting logs, branches, brush and other flammable materials. A large green lawn is ideal;
- ensure debris or windrows resulting from land clearing are no more than 60 metres (200 feet) long;
- leave an eight metre (25 foot) break between each windrow;
- surround the area to be burned by a guard of at least 15 metres (50 feet) clear of flammable material;
- only light as many brush piles as can be kept under control;
- ensure windrows are at least 25 metres (75 feet) away from uncleared land or standing hazardous fuels;
- separate parallel windrows by at least 15 metres (50 feet),

cont'd on page [illegible]

- ensure every fire is supervised by a responsible person approved by the forest officer or guardian; and,
- have fire fighting equipment at the fire site. As a minimum, include one axe, two round point shovels, one hand pail and a supply of at least 200 litres of water.

For further fire safety information, contact your local Land and Forest Service district office.

Contact: Bill Bereska (403)427-2545
Bob Young (403)422-5172

There's gold in them th'ar manure piles

It's difficult to put an exact dollar figure to the nutrient value of manure because of the variability in nutrient content and the nutrients are released over a period of years. Benefits such as better tilth are also hard to quantify. However, manure does have value.

"The nutrients available in manure can lower a farmer's fertilizer costs considerably," says Dr. Ross McKenzie, research scientist - soil fertility with Alberta Agriculture, Food and Rural Development. "If commercial nitrogen (N), phosphate (P_2O_5)and potassium (K_2O) fertilizers have values of $0.35, 0.30 and 0.20 per pound, respectively, and feedlot manure has a content of 21 lbs - N, 18 lbs - P_2O_5 and 26 lbs - K_2O in each ton of manure, then the approximate value of one ton of feedlot manure is $18. If the manure was applied at 10 tons per acre, the value of the nutrients applied would be $180/acre. Keep in mind, however, that only about half of the N and P will be available in the year of application in case of feedlot manure."

A 10 ton/acre application rate should provide enough nutrients in the first year of application to meet the nutrient requirements of an 80 bushel/acre barley crop. If 10 tons of manure are applied each year, the decay rate of nutrients released from the manure must be taken into account.

The cost of delivery and spreading the manure is betweenZ $3 and $5 per ton depending on the hauling distance. At a 10 ton/acre application rate, the total cost per acre of the manure could be $30 to $50. This is excellent value considering that about $180/acre of nutrients are being added to the soil.

"Producers within five to eight miles of a confined livestock operation should consider using manure as a fertilizer source," adds McKenzie. "The potential to purchase manure by paying for delivery and spreading has a double benefit. The confinement operator can dispose of extra manure and a nearby neighbor has an excellent source of fertilizer for the cost of transport. Also, manure applied to machine leveled or eroded fields will also improve the physical quality of the soil. When neighboring farmers can take advantage of win-win situations like this, the whole agricultural community benefits."

A sound manure management plan is essential in any farming operation. Crop specialists at Alberta Agriculture district offices are a resource that can be used when working through the planning process.

Contact: Dr. Ross McKenzie
(403)381-5126

When and how to apply manure

Good fertilizer planning begins with soil testing. Unless a farmer knows what nutrients are needed and in what amounts, fertilizing is shooting in the dark.

"Random soil sampling is one of the basics, it's something that should be done each and every year," says Dr. Ross McKenzie, research scientist - soil fertility with Alberta Agriculture, Food and Rural Development. "If manure has been used for fertilizer in previous years, representative manure samples should be taken yearly and analyzed for total and available nutrients, specifically nitrogen, phosphorus and potassium."

Available nutrient refers to an element in the soil that can be readily absorbed by growing plants. Total nutrient refers to an element in the soil in both plant available and unavailable forms.

"When determining manure application rates, available nutrients and the portion of the unavailable nutrients that will be released from manure in the year of application must be matched to crop nutrient requirements in each field," says McKenzie. "Book values of typical nutrient levels can be obtained from the ***Code of Practice***. Keep in mind that nutrient content of manure is highly variable, depending on source, feed and method of storage."

When fertilizing with manure it's difficult to exactly meet crop requirements for all nutrients. When manure is applied based on one nutrient, other nutrients will either be over or under applied. Complicating the situation further, nutrients such as nitrogen and phosphorus are contained in a number of different available and unavailable compounds. In this way, if not monitored by representative manure samples and soil sampling, repeated applications over a period of years can result in excessively high soil phosphorus levels.

"Crop rotation as part of the over-all farm plan is an effective tool in balancing nutrients in soil," says McKenzie. "For example, applying manure annually to five years of barley silage to meet the nitrogen requirements may have to be followed by four years of alfalfa to draw down the phosphorus soil levels. Another alternative is to apply manure to meet the

Cont'd on page 5

phosphorus crop requirements and supplement with nitrogen There is no single best answer, but there are alternatives."

The decision of when to apply manure is relatively easy. Manure should only be applied in early spring or after harvest and before freeze-up in the fall. Manure can't be spread during the growing season when annual crops are actively growing and manure application onto perennial crops is not normally recommended due to potential runoff and air quality factors. The only exception is if liquid manure can be shanked directly into the soil. Spreading manure onto frozen soils isn't recommended due to the possibility of runoff problems from rapid snow melt which can carry dissolved and solid manure particulate into surface waters.

"When solid or liquid manure is applied, it should be incorporated into the soil the same day as it is applied," adds McKenzie. "Incorporation is critical to prevent nitrogen losses to the air and prevent air quality concerns. The longer manure is left on the soil surface, the greater the nitrogen loss that reduces the value of the manure as a nitrogen fertilizer. Immediate incorporation of manure also prevents potential runoff."

The booklet, ***The Code of Practice for Same and Economic Handling of Animal Manures***, can be purchased for $10, plus GST, from Alberta Agriculture district offices and the Publications Office, 7000 - 113 Street, Edmonton, AB T6H 5T6, or by calling toll free 1-800-292-5697 (please add $2, plus GST, for shipping and handling).

Contact: *Dr. Ross McKenzie*
(403)381-5126

Trucking – a critical step in getting product to market

Trucking is identified as a concern facing rural food processors. When it comes to trucking everything goes much smoother when the responsibilities of the processor and those of the company carrying your product are known.

"From the trucking company's point of view, optimum use of space is the key consideration," says Kerry Engel, rural development specialist with Alberta Agriculture, Food and Rural Development. "It's important for processors to take full advantage of space when packaging and palleting a product. Packaging companies are an excellent source of information on the best packing plan for different product types."

Products must be secured on pallets before shipping. When it comes to palleting, there are several things to remember. Stack as much as possible onto one pallet, space is of the essence. Secure pallets with stretch wrap. Ask the trucking company about free exchange of pallets. Processors must request that pallets are not to be stacked on top of their pallets if it would cause a problem with the product.

"Another thing to consider is insuring the shipment," says Engel. "A good trucking company will carry a minimum insurance of $2.00/pound packaged weight on all products it transports. However, if the value of a product is more than that, processors can purchase additional insurance from the trucking company. Don't forget, trucking companies base everything on packaged weight. For example, if sending jam, the packaged weight will include the product, the jars and the packaging."

Always check to see what the carrier's insurance covers and ask for details in writing. It should cover: temperature abuse (but only if the carrier is informed in writing that the product requires temperature control), trailer incidents, damaged products, and missing products.

The ***Northwest Processor*** newsletter (available through Alberta Agriculture offices) has put together a chart highlighting transportation companies, their contacts, costs availability of reefer trucks, delivery schedule, insurance costs and packaging. The companies highlighted include: FedEx, UPS, Versa Cold, Greyhound, Canada Post, Canadian Freightways and CanPar. (*These companies were most frequently identified as being used by small rural processors and farm produce growers.*)

The winter edition of the ***Northwest Processor*** newsletter highlights how processors have overcome shipping obstacles It also has shipping advice from retailers, trucking and insurance basics and a shipping options chart to make transportation concerns a little easier to deal with. Call (403)349-4465 if you would like be put on the mailing list for the ***Northwest Processor***

Contact: *Kerry Engel*
(403)349-4465

Agri-News Briefs

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 6429

Breaking the pea yield barrier

Alberta Pulse Growers Commission (Zone 3), Alberta Agriculture, Food and Rural Development, Alberta Reduced Tillage Initiative and participating industry are sponsoring a leading edge pea seminar and trade show. Breaking the Pea Yield Barrier is being held at the Westlock Community Hall, Westlock, on February 26, 1998. Topics of discussion include: new pea varieties, start-up for success, inoculants, ascochyta control for standing pea crops, direct seeding, pea herbicides and getting top dollar for pea crops. Pre-register by February 23 by calling the Barrhead Alberta Agriculture office at (403)674-8213.

What weeds reveal about soil deficiencies

Scouting weeds may help farmers with preliminary soil checks. It may be that a soil problem is contributing to the type and severity of the weed infestation. A Florida agri-horticulture company has collected data on what some common weeds may be saying about soil conditions:

Lamb's quarters – rich, fertile soil; decayed organic matter, high humus;

Quackgrass – wet, anaerobic soil, high aluminum (toxic); low calcium and high magnesium and sodium;

Russian thistle – salty soil, low calcium, low decomposition of organic matter;

Smartweed – wet, poorly drained soil;

Foxtail barley – wet soil, possibly high salts and low calcium, compaction, possible acid, unavailable potassium and trace elements;

Chickweed – high organic matter at surface, low mineral content;

Crabgrass – tight, crusted soil, low calcium, inadequate decay of organic matter;

Dandelion – low calcium, organic matter not decomposing.

While weeds may give a general indication that there could be a soil problem, soil testing is the only way to determine the exact extent of nutrient deficiency or over-loading. (Information taken from Circle-One International's discussion on weeds.) Website: **wwwcircle-one.com/weeds.html**

1998 ACTS Soil Conservation Farm Family

The Alberta Conservation Tillage Society (ACTS) has named Cam Hancock and family of Marwayne, AB, as this year's Provincial Soil Conservation Farm Family. The Hancock family will be presented with the award at the society's annual banquet on February 4, 1998 in Red Deer. The Hancock farm switched over to zero-till in 1983. It was one of the first farms in east-central Alberta to adopt this method. Hancock has also shared his experience with other producers, speaking throughout the province and spending many hours in unpaid consultation with farmers considering adopting reduced tillage or zero-till methods. "The Hancocks are definitely a highly focused, conservation-minded family," says Russ Evans, executive manager of ACTS. "It is an honor for the Alberta Conservation Tillage Society to present to them the 1998 Provincial Soil Conservation Farm Family Award." For further information, contact Cam and Maxine Hancock at (403)847-2634.

Steak Out '98

The annual beef producers update for northeast Alberta is on February 11 and 12, 1998. Each year, **Steak Out** is held in three communities. This year the seminars are in:

Glendon – RCMP Hall
February 11 5:30 p.m. to 10:00 p.m.
Innisfree – Community Hall
February 12 10:30 a.m. to 3:30 p.m.
Hughenden – Community Hall
February 12 6:30 p.m. to 10:00 p.m.

Steak Out '98 features four industry speakers addressing current production and marketing topics such as: grazing systems and growing food grass; electron I.D. systems and their use; cattle market outlook and update; and, marketing strategies for cow/calf producers. The seminar is organized by beef specialists and Ag fieldmen and sponsored by the local Agricultural Services Board and United Farmers of Alberta (UFA). For information and registration, contact the beef specialists in St. Paul, Smoky Lake, Vermilion and Wainwright, or the Ag fieldmen in Bonnyville, Two Hills, Vegreville and Provost.

AGRI-NEWS

February 16, 1998

[illegible] 1998

Alberta's first dairy research facility

How do you turn an average cow into a highly productive dairy cow? The research needed to answer that question, and many others dealing with production and quality of milk, will now be conducted right here in Alberta. On February 2, 1998, a new addition to the Dairy Research and Technology Centre at the University of Alberta was officially opened by Hon. Ed Stelmach, Minister of Alberta Agriculture, Food and Rural Development, Robert Krueger, chairman of Alberta Milk Producers and Roger Smith, vice president of research at the U of A.

"The newly expanded facility is the only dairy research facility in Alberta," says Stelmach. "The research conducted here will benefit producers, processors and all Albertans who use dairy products. This unique facility is an example of industry, academia and government working together with no institutional barriers."

The Centre now has 90 new stalls that allows the U of A to expand its herd size to 135 milking cows, improve feed mixing and preparation facilities and adds office space for staff.

"A facility like this one is very important to the Alberta dairy industry," says Krueger. "The opportunity to generate Alberta based research is a real bonus. Research conducted in other provinces and in other countries doesn't always take into consideration the weather and other factors that play a part in Alberta production."

"The strength of the U of A is research," adds Smith. "U of A is one of the top five research universities in Canada. The Faculty of Agriculture plays an important part in achieving and maintaining that status. Agriculture has always been a big part of the U of A's history and is certainly part of its future."

The dairy research unit at the university employs 14 people and provides research facilities for a team of 11 researchers. It also features 180 acres of crop to maintain 1,700 tonnes of feed for the university herd.

Some of the research projects already identified by the Centre include work with feed efficiency and milk conversion. Fashionably referred to as 'designer milk', research will be conducted to help producers understand how breeding, nutrition and management factors influence production to make milk that is lower in fat and higher in protein. The end benefit would be a higher quality milk, tailor made to fit changing consumer demands.

"The research planned at the Centre extends beyond the farm gate and even beyond the conventional food groups," says Dale

Con'd on page 2

This Week

Alberta's first dairy research facility 1

Comparing precision agriculture software 2

Elements of an effective beef breeding program 2

Canaryseed in western Canada 3

January – cool and dry 3

Alberta company shows 4-H support 4

Briefs 4

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT
Publishing Branch

Agri-News™ is published weekly. Reprinting of articles is encouraged. Your comments and suggestions are welcome. A typewritten edition with wider line-spacing is available to media editors upon request. Editor – Lee Anne Palutke

Engstrom, head of the beef and dairy group, Alberta Agriculture. "For example, researching the feasibility of increasing individual, high value components in milk is already on the Centre's slate of projects. In the future, components such as conjugated linolenic acid (CLA), a product only produced by cows and other ruminants, may be harvested from milk. U of A scientists are currently studying the tumour preventative capabilities of this compound."

Dairy research conducted at the Dairy Research and Technology Centre in Alberta will help the provincial dairy industry maintain efficiency and market competitiveness and assist in the development of new technological and environmental practices.

Contact: Dale Engstrom (403)427-4516
Dr. John Kennelly - Chair, Dept. Of Agricultural, Food and Nutritional Science, U of A
(403)492-2131

Comparing precision agriculture software

A comparative study of some precision agriculture software available in the marketplace is now complete. The study was conducted by LandWise Inc. in association with the Canada-Alberta Farm Business Management Program (FBMP).

The software was compared for efficiency in four basic areas:

- managing, accessing and analysing physical record keeping and field-mapping data;
- factors such as map resolution, import-export capabilities, cost-effectiveness and service and help information;
- improving the quality of information by providing capabilities such as yield and economic analysis and enhanced interpretation of spatial data; and,
- improving communication among farm managers and among farmers and suppliers.

"The original study proposal was to examine only 10 software packages assessing seven factors," says Craig Smith, FBMP representative. "The project team, Ron McNeil, Brenda Sawyer and Carolyn Bowen, went well beyond the original intent by looking at 43 software packages assessing 55 factors in a comparative matrix. The detail of the study is impressive."

The study makes useful recommendations for hardware and software requirements. When choosing a software package, being user-friendly and readily available technical support are the two most important factors.

Producers should consider the following questions when making software decisions:

- can a demo copy be used prior to purchase?
- will technical support be available in a timely fashion?
- is there a cost for the support?
- what is the learning curve for the software?
- will this software connect to accounting/business management software?
- will the software read data from a yield monitor?
- what will the software be used for?

Detailed report information can be found on the Internet. The study is posted on the FBMP web page at:
http://www.agric.gov.ab.ca/economic/mgmt/fbmp.html
and on the LandWise web page at:
http://www.telusplanet.net/public/landwise

For further information, contact Anita Lunden, Agriculture business management branch, (403)556-4278 or Craig Smith, FBMP representative, (403)626-3448.

Contact: Craig Smith
(403)626-3448

Elements of an effective beef breeding program

The beef industry is a dynamic and exciting industry. The large number of production factors that impact the business also make it a challenging industry.

"One of the areas in beef production that producers have 100 per cent responsibility for is the genetic makeup of their cattle," says Brian Koberstein, beef specialist with Alberta Agriculture, Food and Rural Development. "Bull selection and the cows retained or purchased set the stage for the genetic potential and suitability of a cow herd. Because producers have complete control over this area of their operation, it's up to them to capitalize on it."

It's critical to select cattle that are suited to the intended market, personal management practices and the environment. The best genetic addition to a herd should be based on suitability.

"There are no 'wrong cows' in today's industry, but there certainly are cases of the wrong cows in a given situation," adds Koberstein. "It's important to evaluate individual breeding programs on an ongoing basis. As long as producers have done their homework/ground work, they will know why they have a certain type of cow or are using a certain type of bull."

The optimum breeding program provides the type of cattle that maximizes profitability. To maximize profitability the management system specific to each operation, including marketing and environment, must be taken into consideration.

Contact: Brian Koberstein
(403)361-1240

Canaryseed in western Canada

Annual canary grass (*phalaris canariensis L.*) commonly known as canaryseed, is a significant crop in western Canada

There are no established grades for canaryseed as the crop doesn't fall under the authority of the Canadian Grain Act, although the Canadian Grain Commission does perform dockage analysis on submitted samples. Exporter specifications are usually designated as having 99 per cent minimum seed purity analysis with a maximum of four per cent dehulled seed.

"Canada accounts for almost 75 per cent of the world production of canaryseed," says Dr. Stan Blade, plant breeder/agronomist with Alberta Agriculture, Food and Rural Development, Edmonton. "At this point, the only market for this crop is as a major component of seed mixtures for wild and caged birds. The price volatility of canaryseed causes the acreage seeded to canaryseed to fluctuate dramatically. Canaryseed can be grown in most parts of Alberta, except for the drier regions of the brown soil zone. The crop can grow in most areas where wheat production is successful."

For producers contemplating a canaryseed crop, seeding should be done in May. Seeding rates range from 27 to 35 pounds per acre. Seedlings are poor competitors, making chemical weed control almost a necessity. Several herbicides are registered for use on canaryseed. As well, the crop may be subject to insect attack, particularly from aphid species. Septoria leaf mottle has also been a significant disease in some regions in the past few years. Land selection is critical, since the crop will tiller excessively in areas of high fertility and moisture.

"***Keet*** and ***Elias*** are currently the two canaryseed varieties used in western Canada," adds Blade. "Of these varieties, selected from the USDA collection originating from Iran, Keet is earlier and has better lodging resistance. A hairless canaryseed variety was registered in February 1997. This variety, developed by Dr. Pierre Hucl at the University of Saskatchewan, is being yield tested at the Crop Diversification Centre North (CDCN), Alberta. Advantages of this glabrous (hairless) cultivar include: reduction and or elimination of itchiness during harvesting and processing, elimination of traditional polishing required with other varieties and reduction in shipping costs due to an eleven per cent increase in seed packing. However, the hairless cultivar 'appears' to be approximately 10 per cent lower in yield than Keet."

With improved handling characteristics of this hairless cultivar, it is anticipated that the high protein and oil content of canaryseed may expand its uses to other processing purposes. On-going research projects include work on the development of a canaryseed variety that could be used as a sesame seed replacement and investigation into resistance of leaf mottle disease.

It is anticipated that seed for hairless canaryseed will be available for sale in 1998 through the Canadian Special Crops Association.

Contact *Dr Stan Blade*
(403)422-1789

January – cool and dry

January is usually the coldest month of the year. The overall 1998 provincial average temperature was 3.4 degrees below normal and the 16.8 mm provincial average precipitation was 7.5 mm below normal (based on the 1961 to 1990 average of 23.3 mm) for January.

"Alberta's weather during January was much colder after two months of above normal temperatures," says Peter Dzikowski, agri-weather specialist with Alberta Agriculture, Food and Rural Development. "Cold arctic air dominated the weather the first half of the month with daily minimum temperatures reaching -25 to -40 C most nights. Temperatures returned to near normal values the third week of January and the month ended with above normal temperatures similar to Alberta's December, 1997 weather."

The provincial average temperature was 3.4 degrees below the 1961 to 1990 average of -13.0 degrees C. Alberta locations reported monthly average temperatures ranging from near normal to seven degrees below normal.

All regions reported cooler than normal temperatures. Southern region reported a departure of 1.8 degrees, central region departure was 4.2 degrees below normal and the northeast and northwest regions departures were both 3.6 degrees below normal. The Peace region departure was 3.8 degrees colder than normal.

"The Peace region had the most precipitation in the province, reporting 89 per cent of normal January precipitation," adds Dzikowski. "All regions reported below normal precipitation in January for the second month in a row. These averages are based on data recorded at 45 Environment Canada climate stations across Alberta."

Details on Alberta's weather and climate can be found on Agriculture's Internet site at:
http://www.agric.gov.ab.ca/climate

Contact: *Peter Dzikowski*
(403)427-3594

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 6544

Alberta company shows 4-H support

Lammle's Western Wear recently donated some revenues from the sale of their new Lammle's Lifestyle Card to the future development of Alberta's 4-H program. Doug Lammle presented the $16,359.00 cheque to Gordon Sherwood, chairman of the 4-H Foundation of Alberta at the recent provincial 4-H Leaders' Conference.

"4-H was a unanimous choice by staff and management at Lammle's," comments Lammle. "The future of Alberta lies in the hands of our youth. The province's quality 4-H program with the contributions of its volunteer leaders, produces young Albertans skilled to take on challenges in their communities and in the agriculture and food industry. I've seen firsthand the positive effects of 4-H on our youth."

Annually, Lammle's contributes more than $40,000 to Alberta's 4-H program. This sponsorship includes several provincial 4-H programs: Leaders' Conference, Club Week, Provincial Congress, Horse Classic, Selections and People Developing People. As well, 4-H participants at all levels of 4-H programming receive Lammle's coupons ranging from a 15 per cent to 25 per cent discount.

Lammle's Western Wear is an Alberta owned and operated company with locations throughout the province. "We are proud of Alberta 4-H'ers and challenge other Alberta-based companies to support our youth," adds Lammle.

Contact: *Carol Sullivan*
(403) 427-4H4H

Agri-News Briefs

Dollars and Sense

This year's Western Canadian Dairy Seminar is being held on March 10 to 13 at the Capri Centre, Red Deer. The seminar speakers will present the latest information in dairy production and technology for commercial dairy producers, researchers, agri-businesses, service and supply representatives, extension and education specialists. In addition to the formal program, the seminar provides ample opportunity for informal discussion with speakers and resource people. During the three days, participants will hear presentations on feeding and management strategies, risk management, nutrition, health and production, and new products. Registration fee is $180 (plus GST) per person. One-day rates are available. For further information, contact Aileen Reilly at (403)492-3236, fax: (403)492-9130 or e-mail: **areilly@afns.ualberta.ca**

Designer marketing and new-age agricultural

Designer agriculture, from creating new transgenic plants that resist herbicides and insects to tailoring the fatty acid profiles of specialty oils and products, is the new age of agriculture according to the Canola Council of Canada. The Council's 1998 convention is targeting designer agriculture and will look at industry transformation and future technologies, agronomic tools and industry needs. The 31st annual convention of the Canola Council of Canada is being held in Saskatoon, SK on March 14 to 17, 1998. For more information, contact Dave Wilkins (204)982-2108, Winnipeg, MB, or e-mail: **wilkinsd@canola-council.org**

Alberta quality pork program coordinator now on staff

L. Dawn LeBlanc began duties as Alberta Quality Pork Program Coordinator on January 5, 1998. Born and raised in New Brunswick, LeBlanc has a B.Sc.(Agr) major in animal science from the Nova Scotia Agricultural College in Truro, Nova Scotia, where her undergraduate research topic was the effect of oxytocin on boar semen qualities. She is also currently completing her M.Sc. in agriculture specializing in swine management, working on a thesis project to investigate the performance of Biotech and Cover-All shelters. "My job is to work with producers, packers and swine veterinarians in Alberta to coordinate efforts in the implementation of a provincial quality assurance program," says LeBlanc. "I am working with Dr. Julia Keenliside to make necessary changes to the provincial program for the introduction of a national quality assurance program in the spring of 1998." LeBlanc can be reached at: (403)427-4538 or e-mail: **dawn.leblanc@agric.gov.ab.ca**

AGRI-NEWS

February 23, 1998

Alternative livestock market study

The final report on the ***Market Study of Alternative Livestock Meats and Other Value-Added Products in Domestic and International Markets*** is now available.

"Prompted by the potential of the alternative livestock industry, an alternative livestock product team was established in 1994 to assist Alberta producers venturing into these new niche markets," says Doug Bienert, market researcher with Alberta Agriculture, Food and Rural Development. "An Alternative Livestock Steering Committee was formed, and this committee pointed out the need for a report on the status of the industry and its potential market. The study, completed in November 1997, provides updated information on the alternative livestock market as well as potential markets for meat and value-added products."

The study, contracted to Brett Oliver-Lyons, looked at uses of alternative livestock meats in the province. Most meat sales were to white-table restaurants. Of the 44 white-table restaurants surveyed, results were very positive. Chefs were generally happy with the products and consumer acceptance was high. Price of the product and consistency of the cut sizes and quality were the main concerns.

"The largest problems producers face are high cost of processing, limited access to federally approved processing facilities and a very limited distribution system," says Oliver-Lyons. "Limited access to federally approved processing facilities is also limiting export market development. And the lack of European Union (EU) approved processing facilities is the biggest problem in developing EU markets."

Processing costs in the few Federal facilities would decrease with increased numbers of animals being processed. Producers, however, cannot afford to produce larger numbers of animals without markets readily available to them.

"Of the surveys returned by importers, Asian countries are the most interested in importing Canadian product for their markets, says Oliver-Lyons. "Alberta producers, however, would have difficulty in supplying the long-term demand of five metric tonnes per month requested by just one of the responding Asian importers under current market conditions."

There is presently very little manufacturing of value-added products from alternative livestock in Alberta. There is almost no manufacturing of finished leather, oil, hair or feather products outside of the arts and crafts and small cottage businesses.

cont'd on page 2

This Week

Alternative livestock market study 1

Minister appoints new Farmers' Advocate 2

Selecting an alfalfa variety 2

Special crops – call it diversification 3

White cockle control project 4

Dirt and soil are not the same 4

Alberta's agri-food export performance under Free-Trade 4

Briefs 5

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT
Publishing Branch

Agri-News™ is published weekly. Reprinting of articles is encouraged. Your comments and suggestions are welcome. A typewritten edition with wider line-spacing is available to media editors upon request. Editor – Lee Anne Palutke

"Value-added products will probably generate a significant dollar return for most of the animals categorized as alternative livestock," adds Oliver-Lyons. "Leather processing has a great potential and there is already some interest from other countries in purchasing green hides from Alberta producers or processors but issues of numbers, hide grading transportation and prices must first be resolved."

The study gives eight recommendations for industry growth and development. They are:

- establishment of meat grading systems
- development of education and promotional material
- access to EU/Federal processing facilities
- Alberta based leather tanning and manufacturing
- web site development
- cooperation between producers of different alternative livestock species
- developing US markets
- research

"There is a need for more research in areas such as lowering production costs and increasing the survival rates of offspring," says Oliver-Lyons. "Of course, market research and development must also keep pace to keep the alternative livestock industry growing."

Copies of ***Market Study of Alternative Livestock Meats and Other Value-Added Products in Domestic and International Markets*** are available by contacting Oliver-Lyons at (403)427-4535.

Contact: Doug Bienert (403)427-4616

Minister appoints new Farmers' Advocate

Dean Lien of Warner was appointed the new Farmer's Advocate of Alberta by Ed Stelmach, Minister of Agriculture, Food and Rural Development.

"Mr. Lien has more than 27 years of farming experience as well as previous business experience in agriculture and public relations," says Stelmach. "His strong background in mediation will also be a real asset to the Ministry."

Lien was recommended by a selection committee consisting of farmers and officials with the Personnel Administration Office.

His related community experience includes being a member of the Farm Debt Review Board, a Councillor and Reeve with the County of Warner and a Senate Member of the University of Lethbridge. He also has a strong working knowledge of the farming community and owns and operates his own farm in Warner.

Lien's mediation background includes organizing and coordinating a Mediation Seminar in Northern Ireland and he possesses certificates in mediation from the Interlex Group of Canada and CDR Associates of Boulder, Colorado.

"Agriculture is changing and growing rapidly, especially in the smaller communities in my area," says Lien. "As a farmer, I can relate to other farmers. I'm glad to have the opportunity to serve in such a capacity."

The Farmers' Advocate office acts as an independent source of information and mediation covering many of the agriculture-related concerns raised by rural Albertans. Lien begins his new duties immediately.

Contact: Ron Glen (403) 427-2137 Bard Haddrell (403) 427-5312

Selecting an alfalfa variety

The number of varieties available in Alberta makes selecting an alfalfa more difficult.

"In many cases, it's difficult to obtain comparative production and longevity information particularly on some of the new private varieties," says Harvey Yoder, crop specialist, forages with Alberta Agriculture, Food and Rural Development, Lac La Biche. "Alberta Agriculture coordinates Regional Variety Trials for many varieties. For varieties not included in these trials, producers need to depend upon is data provided by the seed dealer."

When selecting an alfalfa variety, consider the following:

- how long will alfalfa remain in the rotation;
- will the alfalfa be used mainly for pasture, hay, cash crop or a combination of these;
- is it acceptable to sacrifice additional yield for longevity or vice versa?

"Most alfalfa varieties fit into one of four major types: Standard, Flemish, creeping rooted or Dryland and Siberian," says Yoder. "Standard types of alfalfa are most commonly grown, have a tap root and are considered winter-hardy. They are often used in rotations that will be in production for at least four to five years, or more. Standard varieties include: Algonquin, Beaver, Vernal, Local Grimm and Peace."

Flemish varieties are not as winter-hardy as Standard types but do provide greater regrowth potential for second cuts. These varieties have a very deep purple flower and are more productive that Standard types particularly for the first two or three years of stand. Flemish varieties are best adapted for short rotations and are used for producing hay for the dehy industry or selling alfalfa as a cash crop. Flemish varieties include: Alouette, Anchor, Angus, Surpass and MultiKing 1.

"The Dryland or creeping rooted varieties were developed for drier areas of the province and in most cases are used for pasture production," says Yoder. "The creeping rooted types of alfalfa have a creeping root with the crown set deeper in the

Cont'd on page 3

soil. These varieties are very winter-hardy and can withstand grazing pressure, although not as productive as the Standard or Flemish types. In many cases, creeping rooted types don't produce a reasonable second cut. These varieties have variegated and mixed color blossoms ranging from white to light purple flowers and are crosses between Siberian types and Standard or Flemish types. Creeping rooted types include Spredor 2, Rambler, Rangelander and Heinrichs."

Siberian alfalfa types have yellow flowers and are extremely winter hardy. They are not as productive, particularly in southern Alberta. Under northern Alberta conditions, it may produce a good first cut but no second cut. Anik is the only Siberian type registered.

A few new varieties are sold as multifoliate. Traditional alfalfa plants have three leaflets per leaf. Multifoliate varieties have the genetic potential to produce four or more leaflets per leaf resulting in a higher leaf to stem ratio. This trait is influenced by environmental conditions with optimum growing conditions giving the highest expression. Varieties such as Legend 2, MultiKing 1 and Gala are multifoliate varieties

"Most of the new varieties have been selected for greater disease and insect resistance and plant breeders have attempted to increase the quality and production," adds Yoder "Areas north of Red Deer don't generally experience disease and insect problems in alfalfa. However, in southern Alberta and particularly in the irrigated areas, producers should consider selecting alfalfa varieties resistant to disease or insect pests for that specific area."

Alfalfa varieties that are more winter-hardy are generally not as productive. Knowing the end use and the major category the alfalfa variety fits in to, will help in the selection process.

More information on varieties of alfalfa, establishment and production is available in the factsheet ***Varieties of Pereneial Hay and Pasture Crops for Alberta*** (Agdex FS120/32). Information is also available on pages 23 to 25 in the ***1998 Alberta Seed Guide***. Producers can also contact an Alberta Agriculture forage specialist or look up crops on Agriculture's homepage at **www.agric.gov.ab.ca**

Contact: Harvey Yoder (403)623-5218

Special crops – call it diversification

Special crops are providing a diversification opportunity for many farm families. The problem is often which one to choose. Peas, beans and lentils were once the special crops of choice. Now in the pulse crops alone there are also fababeans, chick peas, lathyrus and others.

"The pulses, plus mustard seed, canary seed and safflower, are big acreage special crops," says Neil Miller, crop specialist, pulse and special crops with Alberta Agriculture, Food and Rural Development, Lacombe. "Also being grown commercially on a fairly large scale are coriander, caraway and mint. On a smaller scale, there's ginseng, borage, quinoa, dill basil and a number of other herbs, spices, pharmaceuticals and nutraceuticals."

Alberta Agriculture, at the two Crop Diversification Centres in Brooks and Edmonton, are testing echinacea, sage, chamomile, low THC hemp, dill, caraway, coriander, cilantro, hyssop, tarragon, stevia, savory, basil, parsley, lovage and monarda. Screening these plants in different locations throughout the province gives producers an indication of their adaptability to Alberta conditions.

"The problem with many of these crops is not growing but marketing them," says Miller. "Established markets don't exist for many crops and buyers don't know the quality Alberta growers are able to produce. A small amount of product can be sold through farmers' markets and other local markets but when producers make the jump to large commercial scale production they can have problems finding a market. This is why developing a marketing plan is essential for producers thinking of growing one of these special crop."

Some special crops are attracting a lot of attention, especially hemp, ginseng and echinacea.

- ***Hemp*** can't be grown legally in Canada, although new regulations are being drafted that could make growing possible.
- ***Ginseng*** is being tried by a few small scale growers across the province. It's a high investment crop, subject to winter kill, disease and prices have also been declining. It must be grown under shade cloth or in the shade of trees and takes four to five years for the roots to reach marketable size
- ***Echinacea*** is harvested for its roots and leaves. Lack of organized markets has been a hindrance to the development of this crop

Opportunities are developing for many herbs, spices, pharmaceutical and nutraceutical crops and the industry will continue to diversify, grow and prosper. New growers should be sure to investigate before investing by first checking with a special crop specialist to see if there are any demonstration plots and information on the crop(s) being considered. Then, prepare a business plan. Alberta Agriculture's rural business development specialists can help in this area

Contact: Neil Miller (403)782-3301

White cockle control project

White cockle is a particularly troublesome weed for some Alberta farmers. Alberta Agriculture, Food and Rural Development, in conjunction with farmers, started researching various chemical controls at Millet and Fort Kent.

"The project, started in 1997, tests several herbicides on barley, herbicide resistant canola and as a dormant spray on forage stands," says Ron Hockridge, crop specialist with Alberta Agriculture, Food and Rural Development, Wetaskiwin. "First year results have been compiled, but it is too early to report any findings from the project. The project will be carried through until 1999 after which a report will be made available."

White cockle is a biennial or short-lived perennial that reproduces by seed. It can be controlled by cultivation, but must be tilled deeply enough to cut the roots off below the crown. With the amount of seed that's in the soil, this method usually doesn't give satisfactory results and new seedlings emerge after the crop is up. The problem can also be compounded when dealing with under-seeded forages because the cockle plants overwinter and out-compete the forages before they have a chance to establish.

"Cutting is not a good solution to white cockle," adds Hockridge. "Though the plant doesn't spread vegetatively, it puts up new leaves when cut. With an established root system in place, a healthy plant forms very quickly and the only feasible control appears to be herbicides."

There are currently no herbicides registered for the control of white cockle and various chemical controls are being tested as part of this study.

Contact: Ron Hockridge
(403)361-1240

Dirt and soil are not the same

The word dirt, a rather dirty word in the first place, conjures up images of vacuuming, dusting and washing up. Soil, on the other hand, is something living and desirable. Soil supports life and farmers do their best to build it up. Soil is not just dirt!

"A healthy soil has a balance of minerals, organic matter, air and water," says Gordon Frank, crop specialist with Alberta Agriculture, Food and Rural Development, Brooks. "The soil is partially filled with soil water and soil air. Soil air is rich in carbon dioxide. It dissolves in the soil water forming carbonic acid, which dissolves mineral compounds required by growing plants. This happens the best when soil structure has large granules and aggregates."

Healthy soils contain organic matter, the storehouse of nitrogen. Organic matter also contains other minerals required by plants. It is the energy and nutrient source for living organisms and improves moisture storage, structure and aeration.

"Prairie soils had five to eight per cent organic matter before breaking," says Frank. "Now, most have only two to three per cent. Also, the proportion of only slightly decomposed organic matter or humus has declined. Humus is black and gives soil its dark color."

A healthy soil contains a diverse group of living organisms. These organisms decompose organic matter and release nutrients. They release carbon dioxide which aids decomposition and are able to destroy toxic compounds. Some of these living organisms fix nitrogen, others carry nutrients throughout the soil and create channels for air and water flow.

"In the past, producers relied on straw, green manure and livestock manure to replace soil organic matter," adds Frank. "Tillage, in general, destroys soil structure, soil organic matter and soil organisms. Reduced or zero tillage, combined with direct seeding has the potential to reverse this trend. All producers should be aiming for healthier soil, anything less is just dirt."

Contact: Gordon Frank
(403)362-1212

Alberta's agri-food export performance under Free-Trade

Since the inception of the free trade agreement (FTA) between Canada and the U.S. on January 1, 1989, Alberta has realized benefits from the agreement. As tariffs have dwindled or been eliminated, exporters have enjoyed substantial savings and bi-lateral trade has increased.

"Due to the effective dispute settlement mechanism introduced under FTA, and the overall positive trade environment created by the agreement, Alberta's agri-food exports to the U.S. have exhibited a significant and prolonged growth," says Michael Adam, senior statistician, statistics and production economics branch, Alberta Agriculture, Food and Rural Development, Edmonton. "In total, Alberta's annual agri-food exports to the U.S. have increased in value by 281 per cent since free trade, rising from $608.6 million in 1989 to $2.32 billion in 1996."

The corresponding Canadian growth was 183 per cent, increasing from $3.58 billion to $10.11 billion. Partial data (January through September) show continued growth in 1997 for both Alberta and Canada. Complete data for the Alberta statistics are available through the statistics and production economics branch.

"Remarkably, exports of value-added products to the U.S. jumped 342 per cent from a 1989 value of $229.1 million to $1.01 billion in 1996. These products include: fresh, frozen

Cont'd on page 5

and processed meats; processed alfalfa; canola oil; wheat flour; bakery products; other cereal preparations; fruit and vegetable preparations; other manufactured foods and animal feeds; and beverages," adds Barbara Pekalski, acting trade statistician, statistics and production economics branch, Alberta Agriculture, Food and Rural Development. "This compares with a growth of 170 per cent ($433.3 million to $1.17 billion) for primary (or bulk) commodities, including live animals and crops."

The agri-food products exported from Alberta to the U.S. in 1996 consisted of 51 per cent primary commodities and 49 per cent value-added products and by-products. By comparison,.the split in 1989 was 61 per cent primary and 39 per cent value-added. On the other hand, the corresponding composition at the Canada level has remained relatively stable at roughly 34 per cent primary and 66 per cent value-added

Owing to the phenomenal increase in exports under free trade the U.S. is a very important market for Alberta's agri-food products. The proportion of total agri-food exports destined for the U.S. rose from a 1989 level of about 33 per cent to around 50 per cent in 1996. The corresponding ratios for Canada were 39 and 52 per cent, respectively

"The increase in exports of agri-food products from Alberta to the U.S. has contributed immensely to Canada's overall balance of agri-food trade with that country," says Adam. "The balance has improved significantly from a ***net import*** of nearly $641 million in 1989 to a ***net export*** of almost $3 billion in 1996."

Undoubtedly, Alberta's agricultural sector (and Canada's) has benefited immensely from the FTA. Future benefits should be even more substantial with the complete elimination of tariffs scheduled for January 1, 1998 under the original FTA terms

Contact:	*Michael Adam*	*Barbara Pekalski*
	(403)422-2886	*(403)427-5386*

Agri-News Briefs

Ostrich – the smart choice

February is **Heart Month**. On average, it is estimated that Canadians eat about 25 per cent more fat than is recommended for daily dietary intake. Research has also linked a high-fat diet to increased risk of heart disease. Ostrich, a low fat, red meat, can be substituted for other red meats in any conventional recipes, and taste isn't the only benefit. Ostrich is:

- low in calories, less than beef or chicken
- a red meat, comparable to beef in iron and protein content
- tender, unique in taste but not unlike beef
- a healthy alternative to traditional meats
- low in fat (only 2 per cent fat content)
- the choice of health-conscious consumers who won't sacrifice flavor.

For more information about Ostrich health benefits, availability and handling and preparing tips, contact Jay Champion, president of the Canadian Ostrich Association at (403)638-2575.

1998 varieties of cereal and oilseed crops

The ***Varieties of Cereals and Oilseed Crops for Alberta – 1998*** factsheet (Agdex 100/32) is now available. It provides information on individual varieties and indicates cereal and oilseed production areas within the province. Important agronomic characteristics are included for varieties of wheat, oats, barley, flax, canola, triticale and rye. The information will help farmers choose varieties that may be best suited to their particular farming programs. Relative yields for six production areas are included along with information on comparative maturity rates, disease and seed treatment information for the varieties. This information was sent to all Alberta farmers in the ***Farm, Light and Power 1998 Seed Guide***. If you missed it, copies are available at the Publishing Branch, Alberta Agriculture, Food and Rural Development, 7000 - 113 Street, Edmonton, AB T6H 5T6 or at all Alberta Agriculture district offices.

Survival of the meat industry

A series of six meetings called *Business Survival in the Changing Meat Industry* is being held across the province. The meetings are a chance for meat processors to come together for an informative afternoon and gain some insight on planning strategy for the future. Sessions topics include: where the industry is today; are you ahead or behind; and, how can you keep up. The half-day sessions, running from 1:00 p.m. to 4:30 p.m., are coordinated by the Meat Processing Industry, a project with marketing services, Alberta Agriculture, Food and Rural Development; Industry Development; the Alberta Meat Processors Association (AMPA); Processing Industries; and Alberta Health and Rural Development Services. Session dates are:

February 24	Grande Prairie	February 26	Morinville
March 4	Airdrie	March 5	Lethbridge
March 9	Red Deer	March 12	Vegreville

Sessions are free to anyone in the industry, such as abattoir operators, mobilers, poultry and secondary meat processors. For more information, contact Susan Kastelen, president AMPA, (403)467-8933 or Jackie Anderson, rural development specialist - business, Alberta Agriculture, Food and Rural Development, Rimbey, (403)843-2201 (government numbers are toll free by first dialling 310-0000).

Alberta hemp symposium

There are many changes taking place with hemp regulations and in considering hemp as an alternative crop for Alberta producers. Alberta Agriculture, Food and Rural Development has been conducting hemp field trials to determine where and how this crop grows in Alberta. Information on these field trials will be shared at the ***Alberta Hemp Symposium*** at the Black Knight Inn, Red Deer on March 10, 1998. The symposium, co-sponsored by Alberta Agriculture and Alberta Agriculture Research Institute, features presentations on: the hemp growing trials conducted by the Crop Diversification Centre – North (CDCN), producer experiences in both the black and dark brown soil zones, building products and processing, textile properties of Alberta grown hemp, paper production and the marketing possibilities and Alberta agri-fibre initiatives. There will also be a panel discussion on the subject *Does Hemp have a Future?* Symposium attendees will also have the chance to speak with hemp product retailers and private breeders. Registration is requested before March 5, 1998. Registration fee is $35 and includes lunch, coffee and GST. For more information, contact Wayne Goruk at (403)427-3122 or the CDCN at 422-1789.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 6668

AL 1.641

CANADIANA

MAR 3 1998

AGRI-NEWS

March 2, 1998

Peas, pigs and protein

To produce today's high indexing, fast growing pigs, producers must pay close attention to animal feed requirements. Adding a protein source to grain is essential to meet pigs' potential for optimum growth. Canadian experience shows that peas, a high quality protein and energy source, can be a cost effective feed ingredient in swine diets.

"As a protein ingredient, peas are high in lysine, the most limiting amino acid necessary for pig growth," says Neil Miller, crop specialist, pulse and special crops with Alberta Agriculture, Food and Rural Development, Lacombe. "Peas are also an effective energy source and a source of highly digestible phosphorus. This combination of protein, lysine, energy and phosphorus makes peas a very desirable feed ingredient for use in swine diets."

Weanling pigs are capable of growing rapidly and using feed efficiently. They require a highly digestible, nutritionally balanced diet to perform well. Pigs weaned at four weeks of age can use up to 30 per cent peas in the diet. Earlier weaned pigs should have a lower amount.

"During the growing and finishing stages, peas can be fed as the only supplemental source of protein," says Miller. "When peas are used as the only supplemental protein, care should be taken to ensure adequacy of other essential amino acids the same as when using any one source of protein. The higher lysine content of pea protein and digestible energy of peas, allows peas to be used in combination with other protein sources to achieve superior overall nutrient contents and potential feed savings in diets."

In Alberta, many hog feeders are combining peas and canola meal to provide an alternative to soy meal. In tests, the pea – canola meal blends resulted in superior growth rates compared to the soy meal control diet.

The characteristics that place peas in demand in grower-finisher diets can be used to good advantage in dry and lactating sow diets, too. High protein quality and digestible energy make peas particularly useful in lactating sow diets. The use of peas in sow diets should only be limited by cost, availability and quality. They are also useful in boar diets.

"When using peas, as with any feed ingredient, it is recommended that all ingredients be cleaned to remove dockage," adds Miller. "All feed ingredients including water should be analyzed. Separate rations should be formulated for the various stages of growth. This is best done by a qualified nutritionist. To test the efficiency of specific feed rations and formulations, the producer should grind the ration to meet the nutritional needs of the pig, measure the feed ration and analyze performance."

Contact: *Neil Miller* *(403)782-3301*

This Week

Peas, pigs and protein 1

Two new AgVenture business profiles 2

Heaves in horses 2

Provincial weed survey 3

Cows have agri-tourism potential 3

Alberta loves the Taste of Success 4

Sheep production course, a big hit 4

Time to plan for ground squirrel control 5

Briefs 6

Coming Agricultural Events 7

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

Agri-News™ is published weekly. Reprinting of articles is encouraged. Your comments and suggestions are welcome. A typewritten edition with wider line-spacing is available to media editors upon request. Editor – Lee Anne Palutke

Two new AgVenture business profiles

Two new *AgVenture Profiles* have just been added to the series of factsheets that address issues and risks in emerging agri-businesses and industries. This year, *AgVenture* profiles were produced for the commercial Rhea industry and the commercial Alpaca industry.

"The profiles address key issues of importance to Albertans considering venturing into new agriculture industries or niche markets," says Lynn Stegman, rural development specialist with Alberta Agriculture, Food and Rural Development, Lacombe. "Each *AgVenture* gives an overall perspective of the industry and its status in western Canada."

The factsheets provide information on regulatory aspects of the industry, marketing opportunities and production requirements in the industry. Economic, finance and key management issues relevant to each industry are also highlighted.

"*AgVentures* also include a section listing key information resources for further research." adds Stegman.

The ***Commercial Rhea Industry*** *AgVenture*, Agdex 484/830-3, along with industry and marketing information, includes valuable information on breeding, managing eggs, incubation, hatching and rearing chicks.

The ***Commercial Alpaca Industry*** *AgVenture*, Agdex 491/830-1, includes information on care and management of fibre and fleece as well as primary markets for this product. The factsheet goes into some detail on the land, facilities and fencing requirements in an alpaca operation.

"Experiencing success in these new, diversified industries is very important," says Stegman.

"Producers are encouraged to pick up copies of *AgVenture* profiles to help them review and research potential markets, industry requirements and economic considerations of these new agri-businesses and alternative livestock opportunities."

AgVenture profiles have been developed for the following industries:

- Alternative Straw Use Industry
- Essential Oils Industry
- Ginseng Industry
- Commercial Saskatoon Berry Industry
- Fresh Vegetable Market Gardening Industry
- Herb/Spice Industry
- Commercial Dried Flower Industry
- Greenhouse Bedding Plant Production and Marketing
- Private Woodlot Enterprises
- Meat Goat Industry
- Commercial Elk Industry
- Commercial Ostrich Industry
- Commercial Rhea Industry
- Commercial Emu Industry
- Fresh Water Aquaculture Industry
- Commercial Alpaca Industry
- Commercial Bison Industry
- Commercial Wild Boar Industry

AgVenture profiles are available through local Agriculture district offices or Alberta Agriculture, Food and Rural Development's publications office, 7000 - 113 Street, Edmonton, AB T6H 5T6.

Contact: Lynn Stegman
(403)782-3301

Heaves in horses

Chronic Obstructive Pulmonary Disease (COPD) or heaves is not a new problem in horses. COPD, usually a lung disease of older horses, results in chronic coughing, difficulty breathing, exercise intolerance and abnormal lung sounds. These symptoms are the result of the narrowing of small airways of the lungs caused by the inflamation and thickening of tissues, constriction of smooth muscles that surround the airways, an accumulation of mucous and exudates with lumens.

"Stables where dusts and molds are common, are usually were signs of COPD will show up," says Dr. Hugh Townsend, veterinarian of internal medicine at the Western College of Veterinarian Medicine, University of Saskatchewan. "Prepared roughage, such as hay and dry feed contribute to the disease. COPD is rarely seen in horses kept out of doors. This only emphasizes the importance of good ventilation."

At the ***1998 Horse Owners and Breeders Conference***, Dr. Townsend spoke on the subject of COPD, its management, prevention and treatment. He says, "Technically heaves is called chronic obstructive pulmonary disease. However, recurrent airway obstruction may be a better name because most cases go into remission when the environment is changed. Difficulty in breathing occurs when susceptible horses are exposed to moldy feeds or dusty conditions."

When a horse shows signs of heaves, the most important thing owners can do is manage the situation and the environment. This means removing the animal from the cause, usually barns with straw bedding and inadequate ventilation.

On-going management includes:

- don't bed with straw, use high quality wood shavings or shredded paper;
- use high quality hay that had low moisture content when baled;

Cont'd on page 3

- cubed or pelleted rations are a better feed for these horses;
- improve ventilation and dust control; and,
- avoid stabling.

"Prevention is the key to controlling this disease," adds Townsend. "Keeping horses outside with access to a windbreak with overhead shelter is probably one of the most important preventative steps that can be taken. If the horse must be stabled inside, be sure to use low dust bedding and keep it clean. Avoid placing the horse in dusty environments for any length of time as this will irritate the lungs and airways bringing on a COPD attack.

"Researchers are trying to find answers to questions of susceptibility and determine if there are any factors that indicate a predisposition to COPD. It's important to ascertain what causes the reaction – whether it is linked to hypersensitivity or hyper-responsiveness and whether or not there could is genetic predisposition and this research continues."

When it comes to treating COPD, there are bronchiodilator drugs that can be used to ease the symptoms, however, management and prevention are the preferred methods of treatment.

Contact: Bob Coleman
(403)427-5096

Dr. Hugh Townsend
(306)966-7097

Provincial weed survey

In a 1997 provincial weed survey, chickweed, stinkweed and wild buckwheat were dominant annual broad-leaved weeds. The survey was coordinated by Alberta Agriculture, Food and Rural Development cereal and oilseed specialists in cooperation with Agriculture and Agri-Canada.

"About 685 fields of spring wheat, barley, oats and canola were surveyed in 20 locations throughout each field," says Ty Faechner, cereal and oilseed specialist with Alberta Agriculture, Stony Plain. "Fields were randomly picked to represent agro-ecological regions of the province."

Green foxtail and wild oats were the dominant grass weeds in the early 1970's. Wild oats has increased in abundance slightly since that time. Green foxtail decreased from the second most abundant weed species in the 1970's to 17th in 1997.

"The survey shows that perennial weeds all increased in abundance," says Faechner. "Quackgrass occurred in three times as many fields in 1997 as in the 1970's. Dandelion and perennial sow-thistle occurred in twice as many fields in 1997 compared to the 1970's. This may be a reflection of the trend to less tillage."

Wild mustard, tartary buckwheat and Russian thistle each had large decreases in their abundance. Weeds to watch include cleavers, common groundsel and pineapple weed which each had large increases in their abundance.

"The influence of management practices on weed population shifts will be investigated using data from a four-page questionnaire sent to farmers last fall," adds Faechner. "Results of this questionnaire are not expected before the fall of 1998."

For more detailed information on a regional basis contact one of the cereal and oilseed specialists who coordinated the weed survey including John Huffman at Grande Prairie (538-5285) Trevor Schoff at Camrose (679-1210), Greg Urichuk at Drumheller (823-1675), Gordon Parker at Vulcan (485-2236), or Ty Faechner at Stony Plain (963-6101). Linda Hall with the Agronomy Unit of Alberta Agriculture, Food and Rural Development in Edmonton acted as provincial coordinator.

Contact: Ty Faechner
(403)963-6101

Cows have agri-tourism potential

As the *Urban Sprawl* continues, quiet country vacation spots will continue to grow in popularity. Already, campsites are filled to overflowing at peak times during the year and the opportunity to offer a comfortable alternative is very real.

"There is a niche that farms could fill in providing an affordable cost alternative for vacationers," says Janice McGregor, rural development specialists – business with Alberta Agriculture, Food and Rural Development. "From a quiet farm cabin in the woods to the adventure of doing some of the farm chores such as egg-gathering, fixing fence or counting cattle, a farm vacation spot can offer much to the vacationer looking for an agricultural experience."

To take advantage to the opportunity of establishing a vacation farm, the farm needs to be vacationer-friendly. That means the house, yard, cabin and the landscape. Consider the long-term direction of the landscape of the farm. Plan strategically to preserve the natural aesthetics, natural shelterbelts and protected watercourses that add to the attractiveness of the farm. Where appropriate, carefully develop walking trails and use user-friendly fences.

"The future of the west country with its natural aesthetics will be a growing attraction to the tourism industry in the next 10 years," says McGregor. "In the future, land and farms may be valued for their agri-tourism potential as much as for their agricultural potential."

Rural development specialists with Alberta Agriculture, Food and Rural Development have extra information that may be of interest on this subject. For more information, contact: Sharon Homeniuk in Westlock (403)963-6101; Morley Kjargaard, St. Paul (403)645-6301; Kathy Lowther, Olds (403)556-4220; Brenda Lea MacPhail in Medicine Hat (403)529-3616;

Cont'd on page 4

Janice McGregor, Morinville (403)939-4351; Mary Ellen Norgard, Vulcan (403)485-2236; Leona Reynolds-Zayak, Vermilion (403)853-8101; Lynn Stegman, Lacombe (403)782-3301; Marian Williams, Camrose (403) 679-1210; and, Jackie Anderson in Rimbey (403)843-2201.

Contact: Janice McGregor
(403)939-4351

Alberta loves the Taste of Success

The Taste of Success, the only program of its kind in Alberta, provides a unique opportunity for Alberta food processors to have their products tasted and evaluated. This year, 27 products were submitted for the first round of evaluations. Of these, 18 products will continue on in the program and be evaluated at six consumer panels throughout the province.

"The products were chosen based on strict criteria of acceptability, saleability and business planning," says Karen Goad, agri-food development consultant with Alberta Agriculture, Food and Rural Development, Grande Prairie. "Taste of Success is a major commitment for the department specialists involved, but the service it provides is invaluable for the processors who make it through the whole process. The efforts of the processors who get their business plan together, their packaging and label design in place and their products in to the specialists for evaluation are also very much appreciated."

The 18 food processors who's products will continue on to consumer taste panels are:

- In A Pinch (spice blends), Edmonton
- Creative Cakes (creamy carrot pecan cake), Red Deer
- Alberta Ostrich Products (ostrich medallions), Lacombe
- Tasty Sensations (Butter Nut Crunch),Okotoks
- Provost Meat Packers (honey pepperoni sticks), Provost
- The Boccaline Grotto Italian Swiss Restaurant (Swiss salad dressing), Canmore
- Prairie Wide Ostrich Product Ltd (smoked ostrich meat), Sherwood Park
- Marion's Yummy Meat Filled Buns (meat filled buns), Rocky
- Country Garden Herbs (herbal butter mix), Lethbridge
- Prairie Hot Mustard (hot mustard), Bow Island
- Aussie Goodies (low fat fruit cake), St Albert
- Overwater Farm (gourmet potato), Olds
- Sylvia's Kitchen Service (Alberta prime gravy mix), Millet
- Sport Dog Ltd (pork sausage), Rocky
- Humble Pies (ground beef and pork pies), Turner Valley
- Down to Earth Greenhouses (ruby garden herbal vinegar), Sexsmith
- River Valley Syrup (birch syrup), Edmonton
- Red Hot Mama's Salsa Ltd, (salsa), Banff

The consumer taste panels where these products will be sampled will be held in Sherwood Park – March 9; Camrose – March 10; Drayton Valley – March 11; Lethbridge – March 11; Lacombe – March 12; and, Grande Prairie – March 13, 1998.

"Through their participation in Taste of Success, processors receive 50 consumer evaluations of their product, assessment of packaging and labelling content and design, as well as feedback on their business and marketing plan. They can also attend a Promotion and Market Development workshop where they receive assistance on developing a promotional package for their business, learn how to make a product presentation to a food broker and be interviewed by local media," says Goad.

Alberta's processing industry is growing rapidly and the Taste of Success is one of the programs specifically designed to assist Alberta processors develop products to a market ready stage. The processors in Taste of Success primarily market through farmers' markets, local restaurants, gift stores, gift basket companies or abattoirs. Many are now ready to take the next step and scale-up their production to meet increasing market demand for their product.

Alberta processors interested in expanding their food business or learning more about the Taste of Success can call the local rural development specialist – business or agri-food development consultant.

Contact: Karen Goad *(403)538-5629*
Janice McGregor *(403)939-4351*

Sheep production course, a big hit

A course held at the Olds College on February 7 and 8, 1998, attracted 24 new and prospective sheep producers. The Beginner Sheep Production course featured an introduction to the industry, instruction in sheep breeds, basic economics, basic sheep nutrition, common diseases and lambing practices.

"The course instructors were Susan Hosford,, and myself," says Dr. Cathy Gallivan, sheep development advisor with Alberta Agriculture. "Participants were kept busy in the classroom for the first day and a half and on the second day, the course moved to the Olds College sheep barn where Olds College employees Kim Woolfitt, sheep technician, and Grace

Cont'd on page 5

Frost, International Projects and former instructor in the Animal Health Technology program, joined us in the hands-on instruction."

Techniques such as catching and tipping, foot trimming, condition scoring, vaccinating and drenching of adult sheep were practised. Students were also shown how to lamb ewes and care for newborn lambs, including eartagging, docking, castration, tattooing and stomach tubing.

"The exceptional level of participation in the sheep production course, combined with other recent events, indicates a renewed interest in the sheep industry by new producers," adds Gallivan.

Olds College is offering additional courses in sheep production during the remainder of 1998. As a result of the interest in the last course, the Beginner Sheep Production course will be offered again on the weekend of March 21 and 22, 1998. Sheep Shearing and Wool Handling is scheduled for April 4 and 5. Intermediate Sheep Production is planned for the weekend of November 7 and 8, with speakers on grazing, predator control, lamb carcass improvement, computerized record-keeping, nutrition, crossbreeding, flock health and more.

For more information on any of these courses or to register, contact Joanne Letourneau at Olds College, (403)556-8377.

Contact: Dr. Cathy Gallivan
(403)224-3962

Time to plan for ground squirrel control

Within the next few weeks, ground squirrels will emerge from their winter hibernation. Now is the time to plan and organize your control effort for these field nuisances.

"The first ground squirrels to appear are adult males, followed in a few weeks by females," says John Bourne, vertebrate pest specialist with Alberta Agriculture, Food and Rural Development. "Juvenile ground squirrels from last year are the last to emerge and follow soon after the emergence of the females."

The only effective way to remove ground squirrels is with poison-treated bait. The best time to offer it appears to be early spring before green-up when other food sources such as grasses and forbs are scarce.

There has been much speculation about the best time to bait ground squirrels. Some experts claim newly emerged adults are more interested in staking out territory and usually have lots of body fat to keep them going until green-up. If this is the case, ground squirrels are not any hungrier in spring than at other times of the year.

Others put forth the argument that ground squirrels have exhausted their fat supply and will turn to cannibalism, eating road killed squirrels, prior to green-up.

"Food baits treated with strychnine or anticoagulants are registered for ground squirrel control," says Bourne. "Some are whole grain mix or extruded pellets, while others, such as Rozol, are a concentrate to be mixed on grain. All baits seem to give varying results. However, the best results occur when placed out in accordance with baiting instructions on the label."

Over the past year, the manufacturers of strychnine mixed grain baits, Ready-To-Use (RTU) baits, have improved the quality of bait by, among other things, using fresh, clean grain and maintaining quality control testing of finished products.

Purchasers of RTU strychnine baits will receive a questionnaire with their purchase," adds Bourne. "Alberta Agriculture, Food and Rural Development strongly encourages end-users to complete and send in the questionnaire to the address indicated. Responses from end-users will help document use patterns and results of RTU bait. The Department, with federal authorities, will work to improve baits in accordance with responses.

If producers have questions about ground squirrel control, please contact John Bourne, Box 24, 4701 - 52 Street, Vermilion, AB T9X 1J9 or by calling (403)853-8225.

Contact: John Bourne
(403)853-8225

Agri-News Briefs

Worm watch

A new program to collect data on the biodiversity of earthworms at the Lethbridge Research Centre (LRC), has sparked national attention. The program shows dramatic potential as a tool for science education and for the development of indicators for soil health and quality. The potential of the study stems from earthworms' unique role as indicators of soil health and productivity. Using information on the species diversity and habitat distribution of earthworms, scientists can develop a database for assessing the sustainability of various land and environmental practices. The project's first phase, aimed at school students, blends science and education offering a way to both sample earthworm populations nationwide and teach children about soil ecology. Students from kindergarten to high school will act as 'census takers' for the earthworms in their area. Any class in rural or urban communities can participate. The Worm Watch program offers students an easy introduction to experimental design and further studies on the soil ecosystem. The program will also help fill a major knowledge gap in the scientific community as currently less than 10 per cent of Canada's land mass has been surveyed for earthworms. Data collected will assist in promoting better soil management across Canada. The LRC is Agriculture and Agri-Food Canada's western regional headquarters for soil sustainability research. Schools and teachers interested in participating will receive Worm Watch kits and a list of support available in the province. For further information, contact Dr. Jill Clapperton, soil ecologist at LRC, (403)317-2294 or Ron McMullin, technology transfer officer with LRC, (403)327-4561.

Agricultural processing industry employment program

Guidelines for the 1998 Agricultural Processing Industry Employment Program are now available at Alberta Agriculture, Food and Rural Development offices throughout the province. The object of the program is to provide career-related experience and skill training opportunities in Alberta's processing industry for students enrolled in a post-secondary institution. This program will reimburse the employer for one-third of the employee's monthly wage to a maximum of $500 per month and provide workers compensation coverage for program employees. Students must be enrolled in a degree, diploma or certificate program and must be returning to school in the fall or winter. For more information, contact the local Alberta Agriculture office.

Funding for Alberta farm women

The Alberta Farm Women's Network (AFWN) is offering funding support to farm women wanting to gain knowledge about diversifying or starting a farm business venture. This can be training or courses in how to move toward value-added products, production, processing, marketing and financing. Support of $100 per day to a maximum of three days is available for conferences, short courses or seminars. For further information or applications, contact AFWN at (403)627-3007 or fax (403)627-4157.

New WAA executive director

The Board of Directors for the Woodlot Association of Alberta have named Rod Scarlett as the association's new executive director. Scarlett will play a significant role in fulfilling and delivering the association's recently approved strategic plan, the Green Paper. The Association's latest initiative is a Non-timber Forest Products workshop slated for March 26, 1998 at Olds College. For more information on Scarlett's appointment, the WAA and its initiatives, contact the WAA at (403)453-1754, e-mail: **woodlot@telusplanet.net** or visit their website at **http://www.telusplanet.net/public/woodlot**

Workshop targets competitive intelligence

First there was market intelligence, and now businesses are looking to competitive intelligence as a business tool. Competitive intelligence is the subject of a one-day workshop March 18, 1998 in Westlock for businesses looking to enter the export market or to improve their position in the market place. Facilitator Jonathan Calof has an international reputation in competitive intelligence and presented a series of workshops on this topic in southern Alberta last fall. The workshop will introduce participants to the information they need to be competitive, where to find competitive intelligence, how to create and build a competitive intelligence capability in your company and an Internet demonstration of how to gather "smart" intelligence. Workshop enrollment is limited to 30 people. The $150 registration fee includes resource materials and lunch. Alberta Agriculture, Food and Rural Development is a co-sponsor of the event. For more information, or to register, contact David Pattison with Alberta Economic Development in Edmonton at (403)422-6648.

Coming Agricultural Events

March, 1998

Calgary Seed Fair and Hay Show
March 1 - 4
Stampede Park
Calgary, Alberta

Alberta Poultry Industry Council Annual Meeting
March 2 - 4
Capri Hotel
Red Deer, Alberta
Contact: Roger King (403)488-2125

Holistic Management Two-day Workshop – Making Decisions
March 2 - 3
Capri Hotel
Red Deer, Alberta
Contact: Randee Halladay (403)729-2472

Farm Salinity & Alkali
March 2
1:30 pm - 3:30 pm
M.D. of Cypress #1 Office
Dunmore, Alberta
Contact: Dave Spencer, Medicine Hat
Phone: (403)29-3616 Fax: (403)528-5213

Cattlesimm
March 3 – 9:30 am - 3:30 pm
High River Prov Bldg
High River, Alberta
Fee: $20.00 plus GST
Contact: AAFRD High River District Office (403)652-8300
Fax: (403)652-8306

1998 Saskatchewan Pork Expo
March 3 - 4
10:00 am - 5:00 pm
Trade Centre, Saskatoon Prairieland Exhibition
Saskatoon, Saskatchewan
Contact: Wendy Hayes (306)933-5078
Fax: (306)933-7352

AgExpo
March 4 - 7
Lethbridge and District Exhibition Pavilion
Lethbridge, Alberta

Peace County Classic Agri Show
March 5 - 7
Evergreen Park
Grande Prairie, Alberta

Prairie Medicinal and Aromatic Plants Conference '98
March 5 - 7
Saskatoon Inn
Saskatoon, Saskatchewan
Contact: Al Slinkard (306) 966-4978
Fax: (306) 966-5015

Cattlesimm
March 5 – 9:30 am - 3:30 pm
High River Provincial Building
High River, Alberta
Fee: $20.00 plus GST, lunch on your own
Contact: AAFRD High River District Office (403)652-8300
Fax: (403)652-8306

1998 Western Canadian Dairy Seminar, 16th Annual
March 10 - 13
Capri Centre
Red Deer, Alberta
Phone: (403)492-3236 Fax: (403)492-9130
E-mail: areilly@ afns.ualberta.ca

Cattlesimm
March 10 – 9:30 am - 3:30 pm
High River Provincial Building
High River, Alberta
Fee: $20.00 plus GST, lunch on your own
Contact: AAFRD High River District Office (403)652-8300
Fax: (403)652-8306

Free and Easy – Three part Professional Development for Educators
March 11
8:00 am - 6:30 pm
U of A Campus
Edmonton, Alberta
Fee: Free
Contact: Betty Gabert – *Ag in the Classroom* (403)427-2171
Fax: (403)422-7755

Cattlesimm
March 12
9:30 am - 3:30 pm
High River Provincial Building
High River, Alberta
Fee: $20.00 plus GST, lunch on your own
Contact: AAFRD High River District Office (403)652-8300
Fax: (403)652-8306

Pasture Weed Identification and Control Course
March 13
1:30 pm - 4:30 pm
Rimbey prov bldg, conference room
Rimbey, Alberta
Contact: Alberta Agriculture, Client Service Representative
Phone: (403)843-2201 or (403)783-3333
Fax: (403)843-4150

Land Resource Management Workshop
March 13
9:00 am - 4:00 pm
Youth Centre (5007 - 50 Ave)
Forestburg, Alberta
Fee: $35 (incl. 50cmX50cm aerial photo, resource binder & roast beef dinner)
Contact: Battle River Research Group
Phone: (403)679-1212 Fax: (403)679-1219

Alberta Pork Congress – PORK '98
March 18 - 19
Westerner Park
Red Deer, Alberta
Contact: Margorie Zingle
Phone: (403)244-4487 Fax: (403)244-2340

Northlands Farm & Ranch Show includes Pedigreed Seed Show
March 25 - 28
Northands Agricom
Edmonton, Alberta

North American Conference on Pesticide Spray Drift Management
March 29 - April 1
Holiday Inn by the Bay
Portland, Maine
Contact: Tammy Gould (207)287-7593
Fax: (207)287-6558

April, 1998

The Second International Symposium on Egg Nutrition and Newly
Emerging Ovo-Bio Technologies
April 5 - 8
Banff Centre
Banff, Alberta
Contact: Linda Callan (403)492-0169

Satellite Conference for the 1998 Nutrient Requirements of Swine
April 14 - 15
U of A
Edmonton, Alberta
Fee: To be announced
Contact: Michelle Follensbee and Ron Ball
Phone: (403)415-0828 and (403)492-7151
Fax: (403)427-1057

Integrated Waste Management Composting Conference '98
April 16 - 17
Olds College
Olds, Alberta
Contact: Kelly MacKinnon (403)556-4683

Alberta Beef Congress
April 23 - 24
Westerner Park
Red Deer, Alberta
Contact: Ken Ziegler (403)845-8200

May, 1998

Visions 98: "Agriculture, Food and the Enviornment for the 21st Century"
May 7 - 8
Black Knight Inn
Red Deer, Alberta
Fee: $125.00, Reg before April 17 – $110, Member $115/$90
Contact: Glenn Hurst (403)291-2430
Fax: (403)291-2641

June, 1998

Bubbles In Food – International Conference
June 9 - 11
University of Manchester Institute of Science and Technology
Manchester, U.K.
Contact: Dr. Grant Campbell
Phone: +44 161 200 4472
Fax: +44 161 200 4399

3rd Annual Alberta Poultry Producers' Workshop
June 16 - 18
Red Deer Lodge
Red Deer, Alberta
Contact: Warren Chorney (403)250-1197

Western Canada Farm Progress Show
June 17 - 20
Regina Exhibition Park
Regina, Saskatchewan

Pacific Northwest Grain & Feed Association Annual Meeting & Conference
June 20 - 24
Sun Valley Resort
Sun Valley, Idaho
Contact: Johathan Schlueter, Portland, Oregon (503)227-0234
Fax: (503)227-0059

Alberta Branch CSGA Annual Meeting
June 28 - 30
Westin Hotel
Edmonton, Alberta
Contact: Bill Witbeck
CSGA Alberta Branch General Manager
Phone: (403)782-4641 Fax: (403)782-5514

Hitting The Mark – Beef Improvement Federation - 30th Annual
Meeting and Research Symposium
June 30 - July 3
Calgary, Alberta
Contact: Canadian Beef Breeds Council
Phone: (403)730-0350 Fax: (403)275-8490

July, 1998

International Triticale Symposium
July 26 - 31
Red Deer Lodge
Red Deer, Alberta

August, 1998

Ninth International Wheat Genetics Symposium
August 2 - 7
University of Saskatchewan
Saskatoon, Saskatchewan
Contact: Pierre Hucl (306)966-8667

Unity In Diversity, Annual Holistic Management conference
August 5 - 7
Ponoka Legion
Ponoka, Alberta
Contact: Cindy Hudson (403)372-2190

November, 1998

Fall Focus 98
November 10
Camrose Regional Exhibition
Camrose, Alberta
Contact: Rosemary Snider (403)855-2286

Opportunities & Profits II – Special Crops into the 21st Century Conference
November 11 - 13
Convention Inn
Edmonton, Alberta
Contact: Wayne Goruk (403)427-3122
Fax: (403)427-5921

Red Deer International Agri-Trade
November 12 - 15
Westerner Park, 4847A - 19th Street
Red Deer, Alberta

Saskatchewan Pork Industry Symposium November 12 - 13
Saskatoon Inn
Saskatoon, Saskatchewan
Contact: Wendy Hayes (306)933-5078
Fax: (306)933-7352

Model-it: Application of Modelling as an Innovative Technology in the Agri-Food Chain
November 29 - December 2
Wageningen, Netherlands
Phone: +31.317.49 02 85
Fax: +31.317.41 85 52
E-mail: MODEL-IT@ATO.DLO.NL

January 1999

Horse Breeders and Owners Conference
January 8 - 10, 1999
Capri Centre
Red Deer, Alberta
Contact: Les Burwash (403)948-8532

Coming agricultural events notice

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 6783

1. Do you know of any provincial (Alberta), national or international agricultural meetings, conferences or conventions coming in 1998 or 1999? Please give the **name** of the event(s):

2. **When** is the event being held?

3. **Where** is the event being held? Include city or town; hotel or convention centre, if known:

4. Please give **name, city** or **town**, and **phone number** of a **contact person** for each event listed:

5. This form has been **completed by** what organization? Please include your phone number:

Please return this form by May 21, 1998 to:

Lee Anne Palutke, Agri-News Editor
Communications Division
J.G. O'Donoghue Building
7000 - 113 Street
Edmonton, Alberta T6H 5T6
Phone: (403)422-6958
Fax: (403)427-2861
E-mail: palutke@agric.gov.ab.ca

"*Coming agricultural events*" **is published quarterly in Agri-News. The next list will be June 1, 1998.**

CANADIANA

MAR 13 1998

AGRI-NEWS

March 9, 1998

Safety message from the Minister

Farming is one of the few professions in the world in which we live on the work-site. I can't think of a better, more positive place to raise our children. Yet, agricultural chemicals, fuel, veterinary products, large animals, dust, noise and stress are among the many hazards that can threaten the health of Canadian farm families.

Changing the behaviour of farm families from the children to the grandparents is an ongoing process, one that takes a commitment from the entire community. It's through cooperative efforts of Agriculture and Agri-Food Canada, the Canadian Coalition for Agricultural Safety and Rural Heath, Alberta Agriculture, Food and Rural Development and other stakeholders that our farmers receive current and useful safety information.

A great deal of progress has already been achieved to help Alberta farm families become more aware of the risks on their farms, but there is still much work to be done. Everyone agrees that children in particular need to be protected from injury on the farm. You don't need to have a teaching degree, just common sense, to teach children about farm safety. The number of farm fatalities in 1997 is down from the previous year and that is certainly a step in the right direction. However, we can not rest until there are no farm accident deaths.

As we gear up for what we hope will be a productive growing season, it's my hope that farm safety education will take a front seat to other activities this summer. Let's continue working together to end all farm injuries during the 1998 growing season.

My children have spent most of their lives on the farm, as have I, my father and my grandfather. In fact, this year, my family is celebrating its 100th anniversary on the homestead. I assure you, ***A Safe Farm is a Great Place to Grow***. All the best for a prosperous and safe 1998 growing season.

Hon. Ed Stelmach,
Minister of Alberta Agriculture, Food and Rural Development

This Week is Farm Safety Week

This Week

Safety message from the Minister 1
Year-round message from a committed team 2
Centre's reach extends across generations 2
Farm safety part of AWI centennial 3
Children, farm safety and John Deere 3
Singer speaks out for farm safety 4
4-H puts safety first 4
Tune in the Great Farm Noise Hunt and save your hearing 5
Finding farm safety on CD-Rom 5
Briefs 6

Alberta
AGRICULTURE, FOOD AND
RURAL DEVELOPMENT

Agri-News™ is published weekly. Reprinting of articles is encouraged. Your comments and suggestions are welcome. A typewritten edition with wider line-spacing is available to media editors upon request. Editor – Lee Anne Palutke

Year-round message from a committed team

A national awareness week is an opportunity to put special emphasis put on farm safety, but safety on the farm is something for every day of the year says Alberta's farm safety program manager.

"Our message year-round is that ***a safe farm is great place to grow***, not just National Farm Safety Week from March 11 through 18," says Solomon Kyeremanteng manager of Alberta Agriculture, Food and Rural Development's farm safety program.

"Safety needs to be part of everyday operations on Alberta farms," he adds. "We know that injuries, and sadly sometimes deaths, occur that involve farm machinery and livestock, but the emphasis of the farm safety message is one of positive prevention.

"There are so many Albertans and Alberta organizations working toward safer farms and safe farm families, we as a team can't help but make a positive difference," he says.

Besides the provincial farm safety program, many agricultural and rural organizations are addressing farm safety issues. The initiatives range from a Women of Unifarm hearing conservation project and an Alberta Womens' Institutes (AWI) children's book series, through to annual summer farm safety day camps sponsored by the Delia and District Ag Society to year-round farm safety and rural health programs at a farm safety centre in Raymond.

"Farm machinery dealerships, other agri-businesses and even companies with rural connections also get involved in local to provincial activities," notes Kyeremanteng. "For example, John Deere Limited is currently involved in its fifth provincial safety campaign for elementary school children. Nova and TransAlta are also long-time program sponsors."

A recent multi-partner project is noteworthy for its approach says Kyeremanteng. "To really make a difference the farm safety message has to be positive – must focus on what can be done to change the situation. It's not enough to tell people what is wrong, instead we want to show them a better approach."

This positive approach took the form a media campaign suggested by the farm safety program; funded by the Canadian Agricultural Safety Program(CASP); supported by broadcasters CFRN-TV in Edmonton, CFCW radio out of Camrose and CISA-TV in Lethbridge; spearheaded by agricultural societies from across the province; co-ordinated and monitored by the AWI.

"Projects that bring together diverse partners that do something concrete to reduce injuries and fatalities on our farms will change the statistics and prove that safe Alberta farms are a great place to grow every day of the year," concludes Kyeremanteng.

Contact: Solomon Kyeremanteng (403)427-4227

Centre's reach extends across generations

A generation gap doesn't exist at the North American Farm and Environmental Safety Centre. Its doors – and programs – are open to all ages.

"We're aiming to take the farm safety message to as many people as possible," says Willard Paxman, chair of the non-profit society that operates the Centre.

Currently, less than a year after the Centre opened, the major programming push is on child injury prevention says coordinator Linda West. "Our focus in 1998 is on teaching children responsibility for their own safety. They learn how to recognize danger and determine what action is appropriate to avoid injury."

Programs will be available at the Centre, located in the southern Alberta community of Raymond, and at schools in southern Alberta.

Because the Centre is so new, opening in June 1997, awareness of the Centre and its programs are also a focus for 1998. West describes the strategy as reaching captive audiences at trade shows, meetings and seminars.

Those audiences will find out more about the research, displays and programs available at the Centre. The 1,500 square foot building houses a model farm with 14 different potential accident sites; interactive displays on the science of safety; displays on such topics as protective clothing, fire safety and machinery hazards; and, a book and video library.

During the summer, the Centre is open to the public. Between September and April, tours must be booked in advance. So far, 4-H, Scout and school groups have taken tours.

"The Centre also organizes and offers courses for adults such as farm first aid, fire arms safety, pesticide application and farm family health issues," notes West.

There is a strong community and partnership element in the Centre. Volunteer labor helped build the facility that is run by a non-profit society. The Centre has been supported by the Town of Raymond and both provincial and federal agriculture departments.

"The Centre's mandate is to reach out to link and cooperate with other organizations such as the Women of Unifarm and even farm safety groups in Montana and Idaho," adds West.

Outreach will go global when the Centre goes on-line with its own Internet homepage this spring. The website **http://www.telusplanet.net/public/farmsafe** will feature program and resource information as well as outline the Centre's mission and principles.

For more information, contact West in Raymond at (403)752-4584, fax: (403)752-3643 or write:
Box 291, Raymond, AB T0K 2S0.

Contact: Linda West (403)752-4585

Farm safety part of AWI centennial

The Alberta Women's Institutes (AWI) didn't just celebrate its centenary in 1997, it left a lasting legacy in schools across the province.

The legacy is class sets of 30 children's books with a farm safety message. Written by Alberta author David Paulsen, ***Tractor Trouble*** is the first in a planned *Close Encounter* series published by AWI.

Janet Halberg, AWI executive director, describes farm safety as a natural fit with her organization that has supported rural families and communities since it was established in Alberta in 1897, and in Alberta in 1909. "Safety of the family has always been dear to us," she explains. "We've always had some type of farm safety project on the go."

Projects have ranged from those on a branch level to provincial in scope. Local branches, for example, have supported provincial farm safety campaigns by distributing contest information to school children in their area. Last summer, two central AWI constituencies – a number of branches are know as a constituency – organized a highly successful farm safety day camp near Pine Lake.

"The goal was to have an event where children not only hear the message, but were shown the message and hopefully would retain the message," says Faye Mayberry, Ridgewood WI president when the camp was held last August.

Working with machinery dealerships, agricultural pesticide and fertilizer companies and a government research station, children between the ages of six and 13 experienced farm safety at a dozen interactive stations. Stations ranged through all-terrain vehicle and lawn-mower safety, to how to approach an animal, to seeing what happened to a dummy when it got caught in running machinery.

On the provincial level, in 1995 the AWI was chosen to be the lead agency for the Alberta component of the four-year, $4 million Canadian Agricultural Safety Program (CASP). CASP's primary objective is to decrease farm injuries and fatalities across the nation and raise the awareness level of farm safety issues. AWI's role includes chairing a board that approves provincial projects.

One example was a major media campaign that started in July 1997. The partnership includes Alberta Agriculture, Food and Rural Development's farm safety program, agricultural businesses and agricultural societies across the province and three broadcasters – CFRN Edmonton, CFCW Camrose and CISA Lethbridge. The upbeat campaign featured testimonial-type farm messages as the 'farm safety thought of the day'. AWI monitored and coordinated the project.

While CASP is slated to end on March 31, 1999, AWI's commitment to farm safety will continue. Currently, book two of the *Close Encounters* series is being developed with assistance from AWI members across the province. Author Poulsen is seeking story ideas from members in AWI's 102 branches that he can weave into a second book about large animal safety

For more information about AWI or CASP in Alberta, contact Halberg in Edmonton at (403)488-5282

Contact: *Janet Halberg*
(403)488-5282

Children, farm safety and John Deere

A winning team will be brought together again during National Farm Safety Week as the fifth farm safety campaign for elementary school students sponsored by John Deere Limited and the Alberta Agriculture, Food and Rural Development farm safety program is launched.

"We're very excited to be working together again," says Solomon Kyeremanteng, farm safety program manager. "Our past partnership with John Deere has been successful beyond measure in the response from young students and the things we've learned from them

"Now I'm looking forward to seeing what the children have to tell us about why a safe farm is a great place to grow."

A Safe Farm is a Great Place to Grow is the theme of the awareness contest. It follows on the heels of previous campaign such as *I Care* postcards, *Super Safety Hero*, *Interview with a Farm Accident* and the *Key to Farm Safety* contests. As with the other contests, students are invited to make a farm safety message, in words or pictures, based on the theme.

Their entries will be eligible for prizes and will be used in other farm safety awareness campaigns. Two grand prizes will be awarded – one trip for four to Edmonton and another to Calgary that include an NHL game. Second prizes of 100 knapsacks with coolers and 50 third prizes of insulated lunch bags will also be awarded

"Reaching children has had a ripple effect in the whole farm community. They become more aware and their awareness touches their families. Involvement of agri-businesses such as John Deere widens the circle," says Kyeremanteng

"While each campaign has had the same basic goal and approach, all have been unique and been a tremendous way of promoting farm safety. We at John Deere Limited are enthusiastic

about continuing this partnership and our commitment to safer farms," says Bonnie Hayden, marketing communications manager for John Deere Limited

Cont'd on page 4

The 1998 campaign will be officially launched at Delia School on March 11 at 2:00 p.m. by Debbie Nelson, honorary chair of the awareness week in Alberta, Kyeremanteng and representatives of a local John Deere dealership.

Contact: Solomon Kyeremanteng (403)427-4227 Bonnie Hayden (403)945-7314

Singer speaks out for farm safety

"I know this is what my Dad would want me to do, not just sing, but help people out," says 21-year old Debbie Nelson from her family home near Delia in central Alberta.

Nelson's fourth single, *It Doesn't Really Matter*, from her Royalty Records debut CD **No Money Down** has just been released to radio and has already received good reviews. Her passion for her music had always been influenced by her father. Her love for her father is also influencing a cause that she is combining with her career.

From March 11 through 18, Nelson will be the honorary chair for National Farm Safety Week in Alberta. When she speaks, she'll speak from experience and from the heart.

Nearly three years ago, her father died in a tractor rollover. The accident was difficult not just because of his death, but because of his careful attitude to farm safety. Nelson recalls him as 'always so careful'. Heart-shaped stickers, familiar to most prairie families, reminding him to take care because his family loved him were all over his farm machinery.

But, the small tractor he was using didn't have a rollover bar. When it slipped on a hill and tipped over, he was trapped and died instantly. While a rollover bar might have saved his life, it's a "maybe if" that Nelson doesn't like to think about. However, encouraging people to add rollover protective structures (ROPS) is part of her message to the farm community, so "other families don't go through what we did," she says.

While growing up, both she and her older brother were given a sense of the necessity for safety around their mostly grain farm. That meant staying away from power take-offs (PTOs) and big machinery. Nelson says it's also important that children learn appropriate actions in dangerous situations, such as how to turn off a PTO if someone is caught in one.

The long-time 4-Her, once a member of the Drumheller Valley 4-H Lamb Club and the Craigmyle Menagerie, made a commitment to the farm safety team before the national awareness week. Nelson has already spoken at schools and to 4-H groups. She'll be a featured speaker in early March at a regional 4-H event.

As well, Nelson will help kick off National Farm Safety Week in Alberta at the school where she started kindergarten and graduated from high school 13 years later. Delia School will be the launching place for the newest provincial student farm safety campaign on March 11 at 2:00 p.m. The campaign will invite students to draw or write why a safe farm is a great place to grow. The contest is sponsored by Alberta Agriculture, Food and Rural Development's farm safety program and John Deere Limited.

Nelson won't limit her championship of farm safety to the national awareness week. This spring, she'll go on a cross-country promotional tour of radio stations from Vancouver to the Maritimes. She says she plans to have more than music to talk about, and will give the same treatment to her farm safety message as she did to *It Doesn't Really Matter*. The song was given to her producer by a writer who asked "to save it for someone who can sing it from the heart."

Contact: Solomon Kyeremanteng
(403)427-4227

4-H puts safety first

Alberta's 4-H program takes the same *learn to do by doing* approach to safety as it does with members' club projects.

"Along with the fun of learning and working with animals and machinery comes responsibility," says Carol Sullivan, provincial 4-H communications and marketing specialist with Alberta Agriculture, Food and Rural Development.

"For example, the first section in the new horse project manual is all about safety. The reminder is that caution must be taken, even around the quietest horse," she adds.

This isn't the only example. All livestock club members learn proper handling techniques. Woodworking club members learn ways to work safely with tools. Snowmobile club members learn safe and skillful operation of the snowmobile.

"Safe techniques learned in 4-H are taken home to the family farm, a practice that fits with this year's National Farm Safety Week theme, ***A Safe Farm is a Great Place to Grow***," says Sullivan. "During the club year many 4-H clubs supplement their safe practices with training in basic first aid. Even junior 4-Hers learn how to react in emergencies. Agriculture production can be hazardous. The 4-H experience teaches members to be alert to work-related hazards, but should accidents happen, the first aid training can be a lifesaver."

Safety in 4-H doesn't end with spring achievement days and livestock sales. 4-H camp counselors receive emergency first aid training by Eric Jones, senior safety officer with Alberta Agriculture. "We focus on prevention and first aid in a camp setting" says Jones. "We tour the site and trails to spot hazards like bee hives and uneven paths. The sessions have helped decrease the incidence of injury during the camps."

Cont'd on page 5

New this summer, is a first aid session for all 12 to 14 year-olds who attend the Battle Lake camps. Jones also conducts an annual safety audit of the Alberta 4-H Centre at Battle Lake. This includes the lodge, dormitory, trails and beachfront area With staff and 4-H counselors, Jones developed emergency procedures to use at the Centre. Besides the safety plans, there are two St. John's Ambulance certified first-aiders on staff. The campers to counselor ratio is eight to one, and all camps with waterfront activities are supervised by a qualified lifeguard.

"We want our members to experience the challenges and fun of camp in the safest conditions possible" adds Sullivan.

For more information on 4-H call (403) 422-4H4H or visit the Alberta 4-H web site at
http://www.agric.gov.ab.ca/ruraldev/4h/index.html

Contact: Carol Sullivan
(403) 422-4H4H

Tune in the Great Farm Noise Hunt and save your hearing

There's another resource besides soil and water Alberta farmers might want to add to their conservation list – their own hearing.

Loud sounds produced by farm, shop, garden and recreation equipment make hearing injury a real risk for agriculture workers. Both noise and pleasant sounds, such as music, can be loud enough to cause permanent hearing loss that can become gradually worse over a number of years.

TUNE-IN Farm Safety, an interactive hearing safety kit developed by the Women of Unifarm, in partnership with Professor Susan Haske, University of Alberta, can help farm families. Alberta Agriculture, Food and Rural Development's farm safety program also consulted on the project.

"The hearing conservation kit helps identify loud sounds on the farm that may be hazardous to hearing," says Carol Sullivan, provincial 4-H communications and marketing specialist with Alberta Agriculture, Food and Rural Development. "It contains *The Great Farm Noise Hunt* video, hearing protectors, a sound level meter, time-weighted exposure guidelines, information handouts, posters and safety alert stickers. The star of the multi-media kit is the animated character called SLiM – the sound level meter, who takes farm families on noise safety hunts."

4-H groups are some of the young Albertans the kits were designed for. The kits can be a starting point for hearing safety hunts to find loud sounds. Participants then choose either turn down the sounds or wear hearing protection.

The Tune-In kit, which received both federal and provincial funding, is also an award winner.

"We're pleased the ***Tune-In*** hearing conservation project was awarded Gold recognition by the Council for Advancement and Support of Education (CASE), an international competition in the area of publications for student audiences," says Florence Trautman, Women of Unifarm president

"The Women of Unifarm hope these kits will encourage rural Albertans to make healthy choices when it comes to their hearing," she adds.

4-H clubs can borrow the hearing conservation kit from their regional 4-H specialist. It is also available on loan from the Multi-Media Library of Alberta Agriculture. Fax your request to (403)427-2861 or e-mail to: **ken.blackley@agric.gov.ab.ca**

Contact: Carol Sullivan
(403) 427-4499

Florence Trautman
(403) 452-7605

Finding farm safety on CD-Rom

A traditional printed child's guide to farm safety has moved into the high technology sphere with the release of **Lost on the Farm**, an interactive CD-Rom game.

"Like the past child's guides this CD-Rom approach lets young students learn and test their farm safety knowledge at the same time," says Solomon Kyeremanteng, manager of Alberta Agriculture, Food and Rural Development's farm safety program.

This high technology approach to reach elementary age students was supported by two long-time sponsors of the former *Child's Guide to Farm Safety* series, Nova Corporation and TransAlta Utilities. As well, the project was supported by Agriculture and Agri-Food Canada, the Canadian Coalition for Agricultural Safety and Rural Health, the Canadian Agricultural Safety Program (CASP) and Alberta Women's Institutes.

"This project was important because we tried a new approach, and because our sponsors were willing to and excited about going high tech," says Kyeremanteng. "The project also recognizes that Alberta students and schools are computer literate and the CD-Rom was an appropriate way to bring farm safety to them."

Currently the CD-Rom is being distributed to Alberta schools free of charge.

For more information about **Lost on the Farm**, contact the farm safety program in Edmonton at (403)427-2171. The call is toll-free by dialing 310-0000 first.

Contact: Solomon Kyeremanteng
(403)427-4227

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 6908

Canadian farm safety facts

- Farm tractors are associated with 48 per cent of work-related farm fatalities. Tractor rollovers and runovers are the leading causes of death. In most cases, there was no rollover protective structure (ROPS) on the tractor;
- entanglement in unguarded, moving machinery is a leading cause of bodily injury on Canadian farms;
- the farm operator is the one facing the greatest risk of fatal injury;
- 10 per cent of work-related and 20 per cent of non-work related farm fatalities involve children under the age of 16 years. Runovers are the most common cause;
- the highest risk category for work-related farm fatalities is men over 60;
- work-related farm fatalities occur mostly in the summer months of July through September, and occurrences were highest on Mondays and Tuesdays; and,
- more non-tractor, machinery fatalities are associated with harvesting than planting activities.

AL 1691

CANADIANA

MAR 18 1998

Agri-News

March 16, 1998

Gearing Up for Spring

Progress in animal industry research

Staff in the animal industry division of Alberta Agriculture, Food and Rural Development create new information through research so Alberta producers stay on the leading edge of technology in livestock production. It is also a part of the division's responsibility to transfer this new technology to producers in an efficient manner.

"Research information that is generated is usually subject to review, often by peers, and only then is it accepted as being applicable to certain production situations," says Dr. Laki Goonewardene, manager – research support, animal industry division, Alberta Agriculture. "One way of validating a research article is to submit it to a scientific journal for publication. The editor of the journal usually sends the manuscript to two experts on the subject and publication depends on their reviews. The Canadian Journal of Animal Science (CJAS) is one such journal that publishes Canadian work that relates to basic and applied animal sciences."

Using the number of submissions to the CJAS in 1996 and 1997 is one way to measure the progress and competency in animal production research. A comparison with Universities and Ag-Canada research stations shows where Alberta Agriculture stands.

In 1996, provincially there were five manuscripts submitted, four of which were from Alberta Agriculture. The total number submitted (Canada, USA and other countries) was 137. The department's contribution was about three per cent. Though that may seem rather small, it's ahead of UBC (1) and University of Montreal (1), Ag-Canada – Lacombe (3) and equal to University of Laval and University of Manitoba and Ag-Canada Lennoxville. The University of Alberta had 13, University of Guelph 8, and Ag-Canada – Lethbridge 14.

"In 1997, provincially there were eight manuscripts submitted seven of which were from Alberta Agriculture," says Goonewardene. "There were a total of 141 manuscripts submitted and the department's contribution was **five per cent.** Based on the number of manuscripts submitted, Alberta

This Week

Progress in animal industry research 1

Alberta quality pork program 2

Macro- and micro-nutrients effect yield 3

Flushing bars reduce wildlife mortality 4

Stocking rates help manage bison 4

Eight driving forces shape agri-food demand 5

Pest predictions '98 6

Bedding plants and greenhouse industry 7

Biological weed control 7

1998 Crop Protection With Chemicals *Guide* 8

Fibre hemp – how it measures up in Alberta 9

Beekeeping in Alberta 10

Aquaculture – look what's been done 11

AgraLoad provides tracking for grain industry 11

4-H – more than you ever imagined 12

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta AGRICULTURE, FOOD AND RURAL DEVELOPMENT

Agriculture ranked **number five**, behind University of Guelph and University of Saskatchewan with 13 each, Ag-Canada – Lethbridge with 11, Ag-Canada – Lacombe with 10 and the U of A with 8.

There has been significant progress in beef and dairy resource materials, also. The beef and dairy group of the animal industry division has developed a number of useful resource materials that are being used considerably by industry. These products include both computer software and publications. The following table gives you an idea of the demand for and sales of these materials.

Material	Year printed	Total printed to date	Total # sold
Beef herd binder	1987	9,850	8,726
Cowchip$	1991	900	725
Cattle Nutr.Course	1990 (2nd ed)	1900	1661
CowBytes	1990	550+ upgrades	625
Dairy Prod. Course	1986 (2nd ed)	1863	1863
DairyBytes	1995	200	63

A total of $1,010,790 in revenue has been generated by the sale of these products and additional software products are being developed by Alberta Agriculture staff, Dr. John Basarab, Dr. Erasmus Okine, Rob Hand, Rick Corbett and Darrel Bignell.

"Value-added products are not being left out of the research loop either. In 1997, some very interesting research was conducted on the value of insect protein in animal feeds," adds Goonewardene.

A well known ecologist, C. F. Hodge (1919), calculated that a pair of house flies can produce in five months, if all flies survived, enough flies to cover the earth to a depth of 47 feet. It sounds absurd ecologically, but it expresses the tremendous reproductive potential of some insects. Our focus is usually on insects as enemies of man. However, if we focus on Hodge's layer of flies it is an impressive pile of animal protein.

"The quality of insect protein is superior to that of soybean meal and is therefore a suitable substitute as an animal feed," says Goonewardene. "House fly pupae and larvae contain 60.2 and 56.4 per cent protein, respectively. The fat content of pupae is 20.2 per cent and larvae 16.9 per cent. This combined with the high protein level makes the insect meal an excellent substitute for meat, fish meal or soymeal in fish or poultry diets."

Currently, fish feeding studies (Rainbow trout) are being conducted using whole dried larvae and pupae produced by growing larvae and pupae on oat hulls, a plant processing waste material which is of little commercial value. In Canada, fish farming is becoming a standard animal production system. This growing industry is totally dependent on the supply of inexpensive animal protein. This value-added feed source will help the fish industry by providing an alternate protein source, thereby reducing the cost of fish production in Alberta.

This research is being done by Dr. Badruddin Ali Khan in collaboration with Ron Beck.

Contact: Dr Laki Goonewardene
(403)427-4545

Alberta quality pork program

As the leader in Canadian Pork Quality Assurance Programs, Alberta has slowed its pace in recent months while taking part in the National Technical Working Group on Quality Assurance. The working group was put into place by the Canadian Pork Council (CPC) to develop national standards for pork quality assurance (QA).

"Individual provincial initiatives were quickly brought together within the CPC to improve efficiency and eliminate duplication," says Dawn LeBlanc coordinator of the Alberta Quality Pork program, Alberta Agriculture, Food and Rural Development. "Established national standards will be beneficial in the export market where the international marketplace recognizes pork from Canada rather than from individual provinces."

The Technical Working Group for the national QA program is made up of producers, veterinarians and government specialists from across Canada. This committee is working toward an April 1998 deadline to launch a national program focussing on food safety concerns on-farm. The first issues being closely considered and scrutinized under the QA program are the issues of drug residue avoidance and broken needles.

The Alberta working committee consists of four producers, a practising veterinarian, a feed industry representative and processor a representative. This committee has been editing and reviewing proposed standards, guidelines and written materials being developed for both the national and provincial level programs. As the four producers are also participating in the project, they provide practical input into the mechanics of running the program. The input of this group, as well as other producers and veterinarians has been invaluable in developing a practical and effective program.

Within the Alberta program, LeBlanc began in January, 1998 as coordinator of the Alberta quality pork program. She will be working with provincial swine veterinarian Julia Keenliside and the Alberta quality assurance working committee to develop and implement the national program for Alberta producers.

"The Alberta Quality Pork program began in 1996 when producers, processors and government decided that setting standards to document the safety and quality of Alberta pork

Cont'd on page 3

was necessary," adds LeBlanc. "The Alberta Pork Producers Development Corporation, Alberta Agriculture, Food and Rural Development and Fletcher's Fine Foods worked together to develop and test a pilot program involving about 60 producers This pilot program has been running for a little more than a year. Regardless of the status of the national program, the Alberta quality pork program will be ready to be opened up to all Alberta producers this April."

Alberta Quality Pork is a voluntary program that developed standards for good production practices and will attempt to bring on-farm critical control points to the attention of producers. It consists of producer and employee education, documentation of good production practices on-farm, third party verification of records and production practices, and carcass quality and viscera health information for the producers. Producers who meet the standards of the program will be certified as Alberta Quality Pork Producers and must be re-verified on a regular basis to maintain this status.

"The implementation of such a program holds benefits for the producers as well as the industry," says LeBlanc. "For the producer, there is a potential for decreased drug costs and trim demerits, a reduced risk of violative residues and established check points to allow for fast and easy identification of any problems that arise. It is an effective management tool and provides the producer with extra health and carcass information from the packers. The documentation of treated animals and the extra information from the packers gives producers a better idea of how their management decisions impact the final product."

Quality Assurance will benefit the industry through an improved image to the consumer, a reduced risk of violative residues, improved market access and marketability and increased information on carcass quality.

Contact: *Dawn LeBlanc*
(403)427-4538

Macro- and micro-nutrients effect yield

If the nitrogen applied last year was supposed to yield a crop of at least 80 bushel/acre of quality feed barley but only 60 bushel/acre of mediocre grain was taken off, there are questions that need to be addressed before next planting season.

"One of the first things that should be done is a comprehensive soil test," says Dr. Ieuan Evans, plant disease specialist with Alberta Agriculture, Food and Rural Development. "Soil testing is an essential tool for determining nitrogen, phosphate, potash, sulphur levels and identifying other nutrient needs. When doing the soil test be sure to avoid high and low or atypical areas of the field."

An 80 bushel/acre crop of barley needs over 100 lbs of nitrogen, 40 lbs of phosphate (P_2O_5), 85 lbs of potassium (K_2O) and 14 lbs of sulphur for both straw and grain production. The grain itself takes out 70 lbs of nitrogen, 30 lbs of phosphate, 20 lbs of potash and 6 lbs of sulphur. The balance of the nutrient (fertilizer) requirements is left in the straw.

"If any of these macro-nutrients were low or deficient, much of the nitrogen application is wasted," says Evans. "If soil test results show that macro-nutrient levels are fine, micro-nutrient levels should be checked. Again this can be done with soil testing samples."

As production puts heavier demands on cropland, micronutrients can be depleted. These micronutrients are also essential for optimum crop production.

"If soil testing shows copper levels of 0.3 ppm (parts per million) and zinc levels of 0.4 ppm, yield will definitely suffer," says Evans. "For Alberta cropland, it is now recommended that soil copper and zinc levels should be over 1.0 ppm. European and Australian recommendations are around 1.5 ppm for copper and 3.0 ppm for zinc as minimum levels for cereal production.

"If a barley crop gets only half the zinc or copper micro-nutrients it needs, producers can expect up to a 50 per cent drop in yield or high percentages of thins."

Barley also has requirements for iron, boron, manganese, calcium and magnesium. These micro-nutrients are usually present in most soils. Soil testing will also show if any of these other micronutrients need to be added to the fertilizer mix.

"Approximately one acre in five on the prairies is low to limiting in copper and about one is seven is low in sulphur," adds Evans. "The importance of soil testing can't be stressed enough. Especially where sandy, sandy loam, high organic and peat soils or soils receiving high amounts of livestock manure are concerned. These soils are often nutrient deficient or unbalanced in one or more macro- or micro-nutrients."

Nutrients alone are not entirely responsible for depressed yield and quality. Drought, flooding, frost, herbicide residues, insects and disease are all factors that must be considered. However, producers have complete control over the nutrient, or fertilizer, status of a crop. It makes sense to eliminate deficient macro- and micro-nutrient levels from the equation for success.

Contact: *Dr. Ieuan Evans*
(403)427-7098

Flushing bars reduce wildlife mortality

First-cut haying activities coincide with the peak waterfowl nesting season, and often many nesting ducks fall victim to a cutting mower. Central Alberta farmers will now be able to save nesting waterfowl by installing a flushing bar to their mowers.

"Ducks, songbirds and a wide variety of mammals are attracted to hay lands as nesting sites and nurseries for their young, and are highly vulnerable during the first cut," says Brett Calverley, field biologist with Ducks Unlimited Canada.

This spring, flushing bars are being supplied and installed for farmers in central Alberta. It will add to over 17,000 acres being mowed annually with these devices in place.

The flushing bar is made of lightweight aluminum, and easily attaches to the front of tractors for use with pull-type hay cutting equipment. Chains, which are attached to the bar, drag through the hay as the machine moves. This motion frightens the nesting ducks and other wildlife to move away from the path of the mower.

"Farmers are generally very accepting of technology that will allow them to maintain their current hay production system, as well as save wildlife," says Calverley. "Approximately 80 farmers across central Alberta have signed 10-year commitments to use flushing bars on their pull-type mowers."

A study conducted on central Alberta first-cut hayfields in 1994 found that 100 per cent of the duck hens survived hay cutting activities when a flushing bar was used, whereas 48 per cent of all nest attending hens were killed with standard hay cutting techniques. "1997 was the first of a two-year study evaluating a similar device for self-propelled mowers," he says.

Ducks, songbirds, deer fawns and numerous other mammals are also expected to benefit from this technology. The flushing bar project is being funding jointed by the North American Waterfowl Management Plan, and Environment Canada under an ***Action 21*** grant.

Producers interested in the flushing bar program can contact Barry Bishop at the Ducks Unlimited office in Camrose, (403) 672-6786.

Contact: Brett Calverley
Ducks Unlimited Canada
(403)489-2002

Stocking rates help manage bison

Stocking rates may be one of the most important management tools a bison rancher uses to ensure herd health and happiness, says a forage specialist with Alberta Agriculture, Food and Rural Development.

Bjorn Berg says setting a proper stocking rate will assure adequate food resources for all animals in the herd.

"The first step is to determine the carrying capacity of the land to set a stocking rate for grazing bison," says Berg. "Carrying capacity is the number of animals an area will support without undue harm to the plants and soil.

"You need to take half and leave half of the forages available. If you take all in a given year, there's nothing left for the plant to survive for the next winter and it could take years to get your plants back."

In a confined grazing situation, the animals may graze heavily in a grassland area and leave areas under trees and shrubs under-utilized. It becomes necessary to know the demand that is going to be placed on the ground with having a minimum impact on the plants.

To do this, Berg says it's simply a matter of analyzing the parcel of land to be used for grazing. Producers must determine the forage availability on both dryland and wetland acres. Berg gives the northern Fescue Prairie at Camp Wainwright in Alberta as an example. That area may produce 500 to 1000 pounds/acre, whereas southern mid-grass prairie found at Suffield in southern Alberta may only produce 250 to 750 pounds per acre.

Forage availability of wetlands such as northern sedge meadows at Bonnyville, Alberta could produce up to 2500 pounds per acre.

Berg recommends that up to half of the forage produced on native rangelands should remain unharvested to maintain the range condition and productivity.

When calculating a stocking rate for bison, it is important for producers to think of the ranch as a whole unit, rather than just the pasture alone. Feed is part of the carrying capacity, but it is also important to know the landscape and plants.

Matching the animal needs to the forage quality, and understanding what the animal demands and the forage supplies are is strongly recommended. Where investigated (mostly native range), bison prefer grasses and sedges slightly more than cattle, and forbs and shrubs somewhat less. "Bison will reduce their intake if they don't like what they're eating," says Berg. "If this is the case, bison will start increasing their grazing time, searching for food, and as a result, will begin to roam."

Cont'd on page 5

Stocking rates also need to be managed to maintain a pasture reserve. This extra forage helps maintain the intake rate on bison and provide reserves for the forage stand to overcome the effects of drought and winter.

"The key is finding the optimum number of animals for the land available by analyzing the acreage for open grasslands, wetlands and trees," Berg adds. "Once you've found this number, you can decide whether to stock two bison per acre or 10 bison per acre."

Contact: *Bjorn Berg*
(403)679-1210

Eight driving forces shape agri-food demand

The agri-food industry is changing rapidly. As time becomes even more precious to people, changes in how and what they eat become more pronounced. A 1997 study, ***The Pursuit of Quality, a Sustainable Growth Strategy for the Alberta Agri-Food Sector*** by Toma & Bouma Management Consultants, points to eight specific factors that have a huge impact on what consumers want and how producers and processors can supply that demand.

"The agri-food industry in Alberta is a thriving and growing part of agriculture in the province," says Lou Normand, director of processing industry division, Alberta Agriculture, Food and Rural Development. "It is important for Alberta agri-food producers and processors to understand the trends shaping this changing industry. The study commissioned in 1997, gives us some real insights into global trends."

The eight 'driving forces' identified in the report are:

- population and demographic changes in North America;
- food for health and food as medicine;
- rapid growth in demand for food products in the Pacific Rim;
- technology advancements in food production, processing and information systems;
- growth of global food production and marketing systems;
- public concern with food safety and origin;
- competition for markets (competitor response); and,
- the growing importance of trade and trade agreements.

"Rising life expectancy and falling birth rates are significant trends in Alberta's major markets, Canada and the U.S.," says Normand. "Along with the increase in the average age of these consumers there are also factors of smaller average household size, a slowing or lowering of household income growth and changing patterns in both work and recreation in the family unit. These factors effect the type of food and food products families choose and impacts where and how meals are consumed, at home, in restaurants, drive-thru or pick-up.

These Lifestyle changes also change the retail side of the industry. Convenience and ready-to-serve food sections are growing in grocery stores and supermarkets. *Home meal replacement* products are being seen in restaurants, specialty stores and supermarkets. Alternative retail outlets, specializing in ethnic foods, health foods and organic foods are also making their presence felt in the market. All of these changes are a direct result of consumers increasing demand for wholesome, high-quality and convenient food and food products.

"Probably the trend effecting the commodity side of agri-food the most is the demand for food as medicines and food for health," adds Normand. "Focussing on cereals, oilseeds and herb crops, consumers are looking for health enhancing foods and natural ingredients. Terms such as functional foods, phyto-pharmaceuticals, nutraceuticals, carotenoids and aeolian plants are helping shape personal diet requirements. It's predicted that professional services offering customized diets based on age, weight, health, stress levels, disease pressures and/or metabolism will be one of the fastest growing 'service' industries in western Canada and U.S."

Research and development in the functional or nutraceutical areas of foods is second only to the research and development for food safety. It includes work with whole grains, portions of grains (oat and wheat bran), oil extracts and secondary products (bee pollen). Added benefits derived from natural plant ingredients in herbs, oilseeds, pulse crops and tropical plants are constantly being advertised, and consumers, looking for extra benefits from the food they eat, are paying attention to the health science in foods and food products.

"Understanding how these two factors change agri-food demands and attitudes is the first step in staying on the leading edge of agri-food processing," says Normand. "Producers and processors are in a position where they must stay informed to plan intelligently. Consumer studies are one of the planning tools available to the agri-food industry."

For a copy of the report, contact the agri-food innovation initiative group (403)422-3166.

Contact *Lou Normand*
(403)427-3166

Pest predictions '98

Forewarned is forearmed. When dealing with crop pests, knowing what insects to be on the lookout for is the first step in being able to quickly treat a pest situation when it arises.

"This year, there are three pests in particular that farmers should be checking for. These are Bertha armyworms, grasshoppers and lygus bugs," says Mike Dolinski, specialist in entomology with Alberta Agriculture, Food and Rural Development. "In the case of Bertha armyworm, parasitism in central and northern Alberta has been increasing to a point where the risk of Bertha infestation should be low but there is still risk north of the Yellowhead (#16) Highway. Farmers north of Hwy 16 should monitor their fields in late July and early August to get an idea of the Bertha population in their fields."

The whole Peace River block has the highest risk for Berthas. Predictions of population numbers comes from monitoring the Berthas and the parasites that attack Berthas. There is usually a delay of two to three years before a population of parasites can bring the pest under control.

"The population numbers from last fall are such that farmers shouldn't panic," says Dolinski. "However, they should be on the look out for Bertha armyworms so that if there is a need to treat, they are able to quickly respond to the problem."

When checking a field and counting Bertha armyworms, remember that any more than 15 per square metre is the population density point where chemical treatment becomes necessary.

"The grasshopper population is gradually building, mostly in southeast Alberta," says Dolinski. "Farmers should make note of where they saw grasshoppers last fall and check those areas again in early spring, especially if it is a hot and dry spring."

Although not expecting any outbreaks of any consequences in 1998, the province is at the leading edge of a grasshopper resurgence. If Alberta farmers experience a good spring and a long, dry fall (excellent weather for egg-laying) it could bring a more severe problem in 1999.

Lygus bugs in canola are the really big potential pest problem for 1998. Last year, 300,000 to 400,000 acres in south and central Alberta had to be sprayed for lygus bugs. On top of that, many fields, right through the province including the Peace River region, were infested but not treated because the problem wasn't identified in time.

"We're going into 1998 not knowing enough about lygus bug mortality and how the population will survive winter and build-up this spring to make any accurate prediction," says Dolinski. "Last year was the first year there was an outbreak situation in Alberta. There was an increase in lygus bug populations in almost the total province. Farmers have to be surveying canola fields and checking for lygus bugs from just prior to bud stage, right through to harvest."

Lygus bugs feed only on the reproductive parts of plants, the bud, bloom and then the seed in the pods. If farmers are finding a significant number of lygus bugs at the bud stage, they can assume that those adults are lying eggs and it's their progeny that harm the seed pods in canola. If large numbers of adults are found through the bud and early flowering stages, farmers will likely have to spray right at the end of bloom.

"Spraying at the end of bloom, the recommended time, means that we will concede some of the buds and blossoms to the bugs but protect the soon to be developing pods," adds Dolinski. "If a farmer sweeps a field at early bud stage and finds lots of lygus bugs, high enough numbers to prevent the plants from coming into bloom, it may be necessary to spray early. While it takes care of the immediate problem, it also means farmers may need to spray again in the late bloom stage.

"The economic threshold for lygus is determined near the end of bloom using a sweep net.

The threshold is 1.5 lygus/sweep based on three sets of 10 sweeps/set. In other words, if there are more than 15 lygus bugs found in 10 sweeps, you are close to having to make a decision on control. We're unsure of how much damage the bug does to canola late in the growing season but the damage definitely decreases as the seeds in the pods mature."

Alberta Agriculture staff will be carrying out lygus bug monitoring programs provincially. Each region will have a monitoring program for this pest. Farmers should contact their local cereal and oilseed specialist for updates on lygus bug numbers in their area.

All canola producers will receive a factsheet on lygus bugs in their Canola Commission newsletter later this year outlining details on identification, detection and control.

"Bertha armyworms, grasshoppers and lygus bugs are the three pests farmers will want to pay special attention to this year," says Dolinski. "One other pest that should always be scouted for is flea beetles. Flea beetles overwinter as adults and there were a number of producers that had problems with them last fall. Those producers who saw lots of flea beetles last fall should watch for signs of flea beetles in early spring at emergence. Provincially, big problems with flea beetles are not anticipated this year."

Contact: Mike Dolinski
(403)422-4873

Bedding plants and greenhouse industry

In response to the rapidly growing greenhouse industry, two bedding plants production workshop were held in Lethbridge and Edmonton and attracted 109 participants.

"Eighty per cent of the Albertans who attended the workshops are planning to build new greenhouses," says Dr. Mohyuddin Mirza, greenhouse crops specialist with Alberta Agriculture, Food and Rural Development. "These people are seriously considering starting into the greenhouse business."

For 1998, the greenhouse crops industry has expanded to grow more vegetables, cut flowers and bedding plants, with major expansion occurring in the area of vegetable production. There are currently 46 acres of seedless cucumbers, nine acres of tomatoes and five acres of peppers in Alberta.

"There is considerable interest in growing cluster tomatoes because of consumer demand for the product," says Mirza. "Cluster tomatoes appear attractive to consumers because of better flavor and presentation. In cases of these types of tomatoes, the entire cluster is harvested and sold as such."

The production of good quality roses and other cut flowers has been gradually increasing. Alberta has been able to compete with imported flowers due to the better quality and shelf-life. Roses, alstroemerias, oriental lilies and asters may last up to three weeks if properly handled.

"The tree seedling production sector is now being handled by 11 growers," adds Mirza. "More than 50 million seedlings will be grown in Alberta this year for reforestation purposes."

The industry is branching out in many directions with new cultivars and crops. In 1998, more than half a million plugs of the medicinal plant echinacea, commonly called purple cone flower, are expected to be grown for field planting. This is a new area in crop diversification in the province and there is a potential to establish a value-added industry to process medicinal plants such as echinacea and many others.

Contact: *Dr. Mohyuddin Mirza*
(403)415-2303

Biological weed control

The biological control of weeds, as an alternative to herbicides, is the focus of much research in Alberta. Biological control is the use of a weed's natural enemies to control it. Natural enemies are arthropods (insects, mites and their relatives), bacteria and fungi that eat or cause disease in the weed. Much of the work currently being done in Alberta involves the release of insects to control problem weeds.

"Insects have some advantages over herbicides," says Jim Tansey, weed biological control technologist with Alberta Agriculture, Food and Rural Development. "These biological control agents are much more selective than herbicides as each variety will only attack one kind of weed. As their population grows, an initial release of a small number of insects can provide continuous control over a large area. The insects attack very tough weeds like leafy spurge and bladder campion and they can be used in many places, such as near water, where herbicides can't be used. Another attractive feature of biocontrol is its negligible environmental impact. There are none of the problems associated with herbicide residues, contaminated groundwater or weed chemical resistance to worry about with these insects."

Potential biological control agents must stand up to several levels of very rigorous testing. In the case of insects, these tests include exposing the insect to a large variety of plant species. If the insect eats only the target weed, even when starved, it goes to the next level. The insect is then, pending federal approval, released on caged and carefully monitored sites. If the insects survive the winter and are successful at damaging or suppressing the weed on these sites, they can be distributed to other parts of the province. These tests are designed to ensure the safety of valuable crop, forage and native plant species and evaluate the effectiveness of the insects at suppressing weeds.

There are several insects available to control weeds in Alberta and most do best on rangeland, pasture land and other non-cultivated areas where they are not disturbed.

"Among the biocontrol agents now available, beetles that attack leafy spurge, a creeping perennial range, pasture and grassland weed, have been the most effective," says Tansey. "One of the reasons that leafy spurge is so difficult to control with more traditional methods is its very extensive root system. It allows the plants to grow back very quickly when cut and also protects the plant from herbicides. Adult *Aphthona* spp. beetles are defoliators and the larvae, which causes most of the damage to the plant, work underground on the roots

There are now five types of spurge beetles available to help control this weed. Each type of beetle is best suited to a specific soil type and habitat. For example, black dot spurge beetle do best in exposed, dry, sandy soils; copper spurge beetles like moist shaded areas; and, black spurge beetles prefer moist, loamy soils.

Cont'd on page 8

The black dot spurge beetle has been successful, reducing spurge density by 95 per cent in a number of areas, but the effectiveness of the other beetles is still being evaluated. As part of this evaluation, 95 releases of black spurge beetles were made throughout Alberta last summer. Information from these sites will give a better understanding of the conditions best suited to these insects. In addition, two species of fly to control leafy spurge are also being looked at.

"Tortoise beetles are currently being used to control the deep-rooted perennial weed, bladder campion," says Tansey. "This weed is commonly found in waste areas, gravel pits and roadsides. These insects have become established on several sites and have had some success at suppressing the weed. Work is also being done on biocontrol agents to combat scentless chamomile. A seed weevil looks promising and has become established on sites in Drayton Valley, Nisku, Edmonton, Vegreville and Grande Prairie. In addition, biocontrol agents for common and dalmatian toadflax, common tansy, field bindweed, purple loosestrife and hound's tongue are also being examined."

None of these insects will eradicate the weeds that they attack. Instead, they will reduce weed numbers to levels that don't affect normal land use, such as grazing, and keep them there.

"An Agri-fax factsheet is currently being prepared to provide more detailed information on the biological control agents available, the screening process used to assess their safety and effectiveness, some tips for people with release sites on their land and more information for those who would like to try biological control," adds Tansey.

Farmers, ranchers and landowners interested in obtaining biological control agents for weeds should contact the local Alberta Agriculture, Food and Rural Development crop specialist, municipal agricultural fieldman, Dr. Alec McClay at the Alberta Research Council in Vegreville (403)632-8207, or Jim Tansey (403)422-0885 and Dan Cole (403)422-0919, both at Alberta Agriculture, Food and Rural Development, Edmonton. Landowners with potential weed biocontrol experimental sites or questions, can contact Dr. Rose DeClerck-Floate at Agriculture and Agri-Foods Canada in Lethbridge (403)327-4561.

The only stipulation to getting a biological control site is that the release area should not be mowed, sprayed, burned, cultivated or otherwise disturbed.

Contact: Jim Tansey
(403)422-0885

Dan Cole
(403)422-0919

1998 Crop Protection With Chemicals *Guide*

To meet pesticide, herbicide and other chemical treatment needs for this year's crops, get the information needed to make the best decisions. The ***Crop Protection With Chemicals*** guide is produced each year to keep Alberta farmers up to date with information on herbicides, insecticides, fungicides and rodenticides.

"Commonly known as the *Blue Book*, the 1998 issue is easy to use," says Shaffeek Ali, provincial weed specialist with Alberta Agriculture, Food and Rural Development's pest prevention and regulatory unit and editor of the '98 guide. "It's the most up-to-date guide of its kind and includes new pesticide registrations, formulation changes, minor use registrations and a complete guide to safety including protective clothing and first aid."

Details on the latest registered mixes and mix restrictions, application tips, expected results, storage and first aid precautions are included in the guide along with a listing of the weeds, diseases or pests controlled by each chemical.

Some of the new features in the '98 *Blue Book* are:

- a complete listing of pesticide container disposal sites with contact names and telephone numbers;
- chemical group numbers are on the same page as the chemical for quick reference for herbicide resistance management;
- an improved chart on Group Classification by Modes of Action;
- new pesticide registrations; and,
- minor use changes.

"The guide includes information on new chemicals, the latest registered mixes, manufacturers application tips, expected results, storage and first aid precautions," adds Ali.

"Even though it gets bigger each year, we have been able to keep the cost down. It's still only $10, plus GST, a great value that helps farmers protect their investments by helping them choose the right way to chemically treat their crops."

Early identification of grass and broad-leaved weeds also saves time and money. Alberta Agriculture's ***Weed Seedling Guide*** ($8 plus GST) helps farmers correctly identify weed seedlings, the first step in taking appropriate action to deal with weeds.

The pocket sized guide contains information on 40 broad-leaved weeds and 10 grasses. It's organized by cotyledon (seed leaf) shape to make identification easier. The 49 illustrations and 50 full-colour photos of weed seedlings and the glossary of terms make this quick reference a publication farmers will want to have on hand.

Cont'd on page 9

Professionals who work with herbicides will want to add ***How Herbicides Work – Mechanisms of Action*** to their reference resources ($25 plus GST). It's well-illustrated and explains in technical detail how herbicides work.

This new publication provides the technical aspects and information on how herbicides enter and move in plants, how they break down in the plant and soil, how they are affected by water quality and spray volume, and how the four major herbicide groups control weeds.

These three publications are available at all Alberta Agriculture, Food and Rural Development district offices or the Publications Office at 7000 - 113 Street, Edmonton, AB T6H 5T6. Credit card orders can be placed by calling 1-800-292-5697. Shipping and handling cost per order is $2, plus GST.

"Identification, advance planning and proper use are important factors in protecting crops," says Ali. "Arming yourself with the information you need is cost effective and it makes good sense."

Contact: *Shaffeek Ali*
(403)422-4909

Fibre hemp – how it measures up in Alberta

In the past three years, there has been a renewed interest in the production of fibre hemp (*Cannabis sativa* L) in Alberta. Its potential and diversification caught the attention of many Alberta producers and processors looking for crops that can be expanded beyond traditional commodities.

"Since 1995, fibre hemp research plots have been planted in Alberta," says Dr. Stan Blade, plant breeder and agronomist with Alberta Agriculture, Food and Rural Development. "Alberta producers were very interested in gaining province specific data on fibre hemp, its growth rate, hardiness and yield potential. Two test plots, licensed by the Health Protection Branch of Health Canada, were managed by Alberta Agriculture. Since the testing first began, Health Protection has been looking at how commercial production of the crop could be licensed in Canada. New regulations and production guidelines should be finalized by Summer, 1998."

Fibre hemp is an annual herbaceous plant that flourishes in temperate regions. All cultivars tested in Alberta are low-THC cultivars. Canada has adopted the 0.3 per cent THC standard established by the European Union as the concentration for non-psychoactive strains suitable for legal fibre production.

Plant growth in Alberta is vigorous. Fibre hemp can reach heights of up to nine metres (30 feet) but the usual average in commercial production is two to four metres (6.5 to 12 feet).

"Fibre hemp has been subjected to intensive breeding programs in Europe attempting to increase bast fibre yield and quality," says Blade. "The plant consists of a single main stalk with an external sheath of bast fibre and an interior core of white, fibrous hurd. The plant can be used for a wide variety of purposes including: rope-making, textiles, paper production and construction materials. Fibre hemp seed has been used as a source of high quality oils for both industrial and edible uses. Protein content of fibre hemp seed oil is 22 per cent, which compares favorably to several legume oils."

Uses of fibre hemp are varied and numerous. In 1997, a $60,000 Ontario research grant was given to the Natural Order Ltd. to study which strain of hemp provides the most seed, the highest quality oil and how the oil can be used by industry. In Britain, a commercial company uses the hurd as an animal litter product and processes bast fibre into mats used for bedding horses. Recent research programs have dedicated over U.S. $9 million to determine whether fibre hemp can be used to develop a pulp and paper industry in the Netherlands.

"Results from low-THC fibre hemp research in 1995 and 1996 indicated the crop would grow well in an Alberta environment. However, there was little understanding of how hemp cultivars would vary in their performance in different areas of Alberta," adds Blade. "The experimental design was set up to evaluate a range of cultivars in varying soil types and growing conditions. Two plant densities were also used to, at the same time, answer questions on whether seed production was a viable alternative for the region."

Plots were planted in randomized complete block design, with different cultivars and two planting densities. The plots were harvested when it was determined that the crop had no further opportunity to develop due to frost or cold weather.

"Data were collected on plant development, biomass productivity and seed production," says Blade. "Height measurements were taken throughout the growing season and one metre samples were harvested from each plot at physiological maturity. There was considerable variance in plant growth between test plots. The results showed higher productivity in the area where there were higher levels of precipitation and extended periods of warm weather. Total biomass ranged between 8.92 and 17.32 tonnes/ha.

The harvested portions of the plants were bagged separately and threshed. Seed samples were sent to the University of Manitoba for fatty acid, tocopherol and trienol composition analysis.

"Results also showed that seed production was possible in the province," says Blade. "Composition of seed samples from four cultivars indicated an excellent saturated:unsaturated fatty acid ratio."

Cont'd on page 10

The monounsaturated fats in fibre hemp seed oil is composed primarily of oleic acid. Humans can manufacture their own oleic acid and though not required in the diet, several studies have show that dietary oleic acid can reduce blood plasma cholesterol levels. The polyunsaturated fats are essential fatty acids that cannot be produced by the human body. Their role in reducing plasma cholesterol levels is well-documented. The seed oil also contains useful compounds such as stearidonic acid and high levels of tocopherols (alpha, beta, gamma and delta) as well as alpha tocotrienols. Tocopherols and other compounds have been identified as anti-oxidants, which some research has identified as anti-cancer compounds. The presence of these tocopherols and alpha tocotrienols indicate why the oil could be valued as an economic product.

"The 1997 low-THC hemp research trials provided useful information in beginning to assess the potential of hemp as an economic crop for producers in Alberta," says Blade. "It is also clear that there's a great deal of variability in hemp cultivars, and that the crop responds to agronomic manipulation. The ecological conditions within regions also plays a significant role in productivity."

Although questions still remain to be answered regarding this crop, the collaboration of producers and Alberta Agriculture staff has successfully initiated the development of a useful empirical base to make decisions on the economic value of hemp.

Contact: *Dr. Stan Blade*
(403)422-1789

Beekeeping in Alberta

Beekeeping in Alberta goes back to at least 1885 when the Henderson family brought in a few hives of bees by train from Ontario. Since then Alberta beekeeping has grown into a more than $20 million dollar industry that provides employment for many Albertans and an enjoyable hobby for many others. It also provides pollination services for many important crops – over 20,000 colonies are involved in the production of hybrid canola seed and borage pollination is starting to become important. Last and not least - the long days, favorable climatic conditions and large acreages of nectar secreting plants let Alberta beekeepers produce over 20 million pounds annually of the best honey in the world.

"There are about 750 beekeepers in Alberta operating 175,000 colonies of bees," says Kenn Tuckey, provincial apiculturist with Alberta Agriculture, Food and Rural Development, Edmonton. "But, this doesn't really give a clear idea of the scale of this important aspect of agriculture in Alberta. In any season about 150 Albertans who have beekeeping equipment are without bees in their hives. Another 400 beekeepers are hobbyists with less than 50 colonies. The next group is 125 sideline beekeepers with up to 600 colonies of bees. The last group of 75 are the commercial beekeepers who make most or all of their income from beekeeping."

The members of the commercial beekeepers group operate from 600 to 10,000 colonies. Currently there is a modest growth in the Alberta industry but most change is occurring as older beekeepers sell their operations or pass them on to the next generation. If they meet certain criteria, Alberta beekeepers are eligible to participate in a honey crop insurance program and the NISA (Net Income Stabilization Account) and FIDP (Farm Income Disaster Program) programs.

Alberta's 750 beekeepers are only about 7 per cent of the 11,000 beekeepers in Canada but they operate 33 per cent of Canada's 520,000 colonies and produce about 33 per cent of the average Canadian honey crop. Because beekeeping makes such a good hobby, very populous provinces such as Quebec, Ontario and British Columbia have large numbers of beekeepers but relatively few colonies of bees.

"Beekeeping is relatively inexpensive to get into when compared to some other forms of agriculture," adds Tuckey. "A large beekeeping operation can be operated from 10 acres of land or less. To be successful, a beekeeping operation must be located in an area where there is large acreages of blooming crops to provide nectar and pollen to the bees. The major investment for a beekeeper is the hives that his bees live in."

Beekeepers place their bee colonies in many small clusters or bee yards throughout the surrounding countryside so a good truck is also a necessity. Since honey is a food product, a quality building is needed as a base of operations - for storage of material and, more importantly, as a place to extract the honey crop.

Unfortunately, there are not a lot of places to learn beekeeping. Fairview College annually offers a course to train beekeeper technicians or helpers. Many of Alberta's new beekeepers are graduates of this program. In even numbered years Simon Fraser University in Burnaby, British Columbia offers an extensive course taught by people who already have at least some experience with honey bees. From time to time introductory beekeeping courses are offered by local extension education groups.

"The Apiculture program of Alberta Agriculture, Food and Rural Development offers assistance to prospective beekeepers," says Tuckey. "The Alberta Beekeepers Association publishes a newsletter which provides information on a monthly basis. The Association's annual convention in November is also a good place to obtain up-to-date information and local beekeepers associations are good places to meet beekeepers and exchange information and ideas.

Cont'd on page 11

However, the best way to learn beekeeping is to work hand in hand, in the bee yard, with an experienced beekeeper."

Contact: Kenn Tuckey
(403)415-2314, Edmonton
e-mail: ***tuckey@agric.gov.ab.ca***

Doug Colter
(403)837-2211, Fahler
colter@agric.gov.ab.ca

Aquaculture – look what's been done

In the spring of 1997, Alberta Agriculture, Food and Rural Development assumed full responsibility for aquaculture in the province from Alberta Environmental Protection. Alberta Agriculture is responsible for the administration of aquaculture licencing, marketing, research, development and technology transfer.

"A new aquaculture section was formed under Alberta Agriculture's animal industry division," says Duncan Lloyd, aquaculture section head with Alberta Agriculture, Food and Rural Development. "The transfer is consistent with the department's commitment to assist the growth and development of this industry in the province."

The transfer will better address customer and industry needs, facilitating their capabilities to compete, diversify, create value-added products and contribute to rural development.

"It became imperative that the aquaculture section establish itself quickly in order to assist the aquaculture industry," adds Lloyd. "In 1997, staff licenced 86 commercial facilities and 2300 recreational fish farmers. A Research and Advisory Committee was formed to gather industry and other stakeholder input and form partnerships in potential new research initiatives and value-added product development."

In 1997, work began on a new *Aquaculture Bulletin* that will be published three times a year and will feature articles of interest to the industry. Technical reference material and books were purchased for the new Aquaculture library and are available for loan to industry. In partnership with the Lethbridge Community College, the first three of a nine-module technical educational transfer program was developed.

To assist industry in preparation of risk assessments for the introduction of new aquaculture species into the province, a new procedures manual and process consistent withthe National Policy was adopted. With input from industry, a five year (1998-2003) Aquaculture Business Plan section was prepared to address the specific responsibilities of: financing, marketing, the development of research, extension/education, disease surveillance, managing risk, staff development, and protection of national resources.

"The main challenges facing Alberta's aquaculture industry is sustainability both economic and environmental," says Lloyd. "To maintain profit, issues of water quality, water access effluent treatment, and disease control will be addressed in 1998. Use of water re-circulation technology allows fish to be raised year-round in a controlled environment in almost any location in Alberta."

Industry growth will occur by working in partnership with the Alberta Fish Farmers Association to significantly increase the number and size of intensive aquaculture operations, development of quality aquatic re-circulation systems, and adding value to products through processing and other market strategies.

Contact: Duncan Lloyd
(403)381-5539

AgraLoad provides tracking, invoicing for grain industry

Grain buyers and sellers in the western Canadian marketplace can now take full advantage of credit, delivery, dispute, price and basis risk protection through AgraLink Exchange Ltd. The company officially implemented the final components of its exchange services on February 2, 1998.

"AgraLoad is the tracking system used by AgraLink that provides counter-parties the ability to schedule and monitor delivery, to track loading and unloading, and accurately record weights. AgraLoad is like having your own grain transportation system at your fingertips, complete with an unbiased dispute resolution panel," says AgraLink president Sheldon Fulton. "AgraLoad allows customers to manage their loads interactively with their counter-party, with the risk protection of an Exchange to backstop the delivery.

The facility is designed to eliminate the two major concerns raised with anonymous electronic trading by ensuring the credit-worthiness of the counter party (customers must meet the financial criteria of the Exchange) and assuring the performance of delivery and quality standards

"The financial clearing service includes the clearing of trades, invoicing and payment process for all deliveries," says Fulton "All customers are required to go through the financial review process and post margin accounts with the Exchange

AgraLink and its investors recently completed an agreement with the TD Bank and Alberta Agriculture Financial Services Corporation for a total $3 million backstop facility, providing a necessary reserve fund to the financial clearing component of the Exchange.

Cont'd on page 12

"The Exchange is a technological evolution in bringing buyer and seller together efficiently and anonymously in the grain industry," says marketing vice-president Greg Lore. "AgraLink provides measurable benefits through a system designed by its customers. Industry participants told us they want real-time price discovery and market information, lower marketing costs, convenience, and better risk management services. The advanced user-friendly technology delivers these needed benefits to customers who must adapt to an increasingly complex marketplace. Using technology that is already present in the marketplace makes it easy for most anyone to access and use AgraLink.

AgraLink customers currently include major grain companies, livestock feeders, feed mills, hog operations and producers.

AgraLink provides real-time, cash market information and the ability to transact via AgraLink's proprietary software and secure Internet transmissions. The system combines proven technology with the structure and discipline of formal commodity exchanges, by providing real-time price discovery for feed grains in western Canada (currently feed wheat, barley, peas and milling oats).

"The result is performance through a cost-effective, secure and open trading arena for Western Canadian agricultural products," says Fulton. "Anyone interested in viewing the grain market, from feedlot and feed mill operations, to producers and grain elevators, will find this service helpful."

A consortium of financial and industry leaders in agribusiness backed the multi-million dollar AgraLink venture. Calgary investors Manvest Inc., Dox Investments, AgriVest Capital Corporation, and Trimac partnered to launch the AgraLink Exchange system in January, 1997. AgraLink's new corporate offices are located at Suite 200, 1055 - 20th Avenue, NW, Calgary, Alberta.

Contact: *Sheldon Fulton* *Greg Lore*
(403)210-2144 *(403)210-2144*
http://www.agralink.ca

4-H – more than you ever imagined

Spring is here and that means Alberta 4-H'ers are busy working on their speeches for club, district and regional speak-offs. To complete and get credit for the year, 4-H'ers must take part in a communications activity.

"Alberta's 4-H program encourages the development and growth of communications skills in all members. 4-H communications activities vary from doing demonstrations, chairing club meetings, voicing radio spots to competing in public speaking competitions," says Carol Sullivan, provincial 4-H communications and marketing specialist with Alberta Agriculture, Food and Rural Development.

At the club level, 4-H'ers learn how to run a meeting. They learn the responsibilities of executive and committee positions, how to make motions and report on their activities. As they *Learn To Do By Doing* through their club projects, they appreciate the value of extra effort. Participating in events from the local to international levels, 4-H'ers, recognize the dynamics of competition.

The recent *Measures of Success* study looked at the impact of the 4-H program in Canada on members, families and alumni. It proved what industry leaders have noted for years: 4-H gives youth the edge to compete in today's world. 4-H'ers gain leadership skills, communication skills, decision-making and financial management skills. They develop self-confidence and self-esteem. They are prepared to become responsible citizens active in their communities.

"All this is accomplished in a caring environment lead by volunteer adult leaders. And the most important component is fun for everyone – 4-H'ers, their families and leaders," adds Sullivan. "The members plan their activities so there are many opportunities to meet new people and begin lifetime friendships."

4-H'ers stand out in their communities. They are active in their schools, churches and youth groups. Former 4-H'ers are well represented in boardrooms from the local agricultural society to the corporations of the global marketplace.

Join 4-H today! Call (403) 422-4H4H or visit the Alberta 4-H web site at:

http://www.agric.gov.ab.ca/ruraldev/4h/index.html

Contact: *Carol Sullivan*
(403) 422-4H4H

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 7021

AL.1.641

CANADIANA

MAR 24 1998

Agri-News

March 23, 1998

Spring soil preparation

Perhaps nothing can influence the health of a planting, whether it be a vegetable garden, flower bed or perennial border, like good soil preparation. Poor soil is at the root of many plant health problems.

There are some basic steps to follow when preparing soil. First, invest in a soil test. A soil test is like a road map that tells you where you are and where you want to go. It can determine pH level, organic matter content, available nutrients and the texture of soil.

"There are a couple of things to keep in mind when taking soil samples," says Shelley Barkley, information officer at the Crop Diversification Centre-South, Alberta Agriculture, Food and Rural Development. "Use clean tools to take the sample. The depth of the sample will depend on what is going to be grown – for flower and vegetable gardens samples take surface samples from the first six inches and the same number of samples from six to 12 inches deep. It is not possible to test all the soil in a garden, so take these random samples and mix them in a clean pail for each soil depth.

"Taking three samples from flower beds less than 10 square metres is usually sufficient. Increase the number of samples by two sites per 10 sq. m in beds over 10 sq. m. To take a sample with a shovel, remove one shovel full to the proper depth. Cut a clean soil slice about 1.5 cm thick from the hole surface, trim away the soil on each side of the shovel so a 2.5 cm strip remains."

Immediately after taking samples, mix the soil in each container well, then remove about 500 ml of soil and dry on a clean piece of paper. This step is vital! The nitrogen levels will not be accurate if the soil has not been dried within 24 hours of taking the sample. Soil testing is done by private labs all over the province, check the yellow pages of the telephone book.

"Perennial weeds can be a giant problem, especially in perennial plantings like fruit crops or perennial plantings," adds Barkley. "Before planting any of these perennial crops, a systemic, non-residual, non-selective herbicide like glyphosate will help to remove those stubborn weeds."

Cont'd on page 2

This Week

Spring soil preparation 1

New livestock protection system in place 2

Rats — not for sale in Alberta 2

Alberta farms are becoming safer places to grow 3

Mild, dry winter weather continues in February 3

FBMP calls for proposals 4

Money for STARS and the 4-H Foundation 4

Agronomic mapping 5

Briefs 6

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta AGRICULTURE, FOOD AND

After applying the herbicide, wait 14 days to be sure the vegetation is dead before roto-tilling. After working the soil up, it's time to start adding the amendments. Organic matter is critical to soil, improving physical, chemical and biological properties. In clay soils, organic matter actually creates structure, which increases the air space in soil and improves water drainage. In sandy soils organic matter increases both moisture and nutrient retention.

"Peat moss, leaf litter, animal and green manures, mushroom compost and compost are all excellent forms of organic matter," says Barkley. "Work the organic matter into the soil as deeply as possible. This encourages plants to root deeply and improves drought tolerance. Soil that can be worked with your hands has sufficient organic matter. Manures can be used to increase the soil nutrition, but an excess of animal manure can increase soil salinity. The maximum rate of animal manures is 100 kg for 10 sq. m (220 lbs/100 square feet)."

If the addition of fertilizer is indicated by the soil test, it can be incorporated along with the organic matter.

Time spent preparing the soil is not as fun as time spent choosing or even planting plants, but it is essential to the establishment and continued health of plants.

Contact: Shelley Barkley
(403)362-1305

New livestock protection system in place

The responsible and humane care of livestock in Alberta is the mandate of the new Alberta Livestock Protection System (ALPS). This innovative initiative is a partnership of Alberta Agriculture Food and Rural Development (AAFRD), the Alberta Foundation for Animal Care (AFAC), representing the livestock industry, and the Alberta Society for the Prevention of the Cruelty to Animals (Alberta SPCA), representing public concern for animal welfare.

"The livestock industry is growing in Alberta and we must show the public, by our actions, that the humane treatment of the livestock in our care is a priority," says Ed Stelmach, Minister of Alberta Agriculture. "ALPS is a pro-active initiative and clearly demonstrates the industry's commitment to animal care."

ALPS has been created in direct response to growing public and producer concern for an effective, accountable and coordinated province-wide program targeting animal care. "This concern is even more important in view of the projected expansion of livestock numbers in Alberta in the next decade," states Peter Schuld, chairman of AFAC. "Increasingly, animal welfare is becoming a trade issue. We want to have a humane treatment of farm animals system that places Alberta in a leadership position, worldwide."

"Traditional animal welfare organizations, like the Alberta SPCA, have a greater opportunity to protect and improve the well-being of animals by working with AFAC and exemplary producers of the livestock industry, not opposing them," says Joy Ripley, president of the Alberta SPCA. "ALPS demonstrates this positive approach. It meets the needs of farm animals, the expectations of the producers and the public."

Alberta Agriculture is providing new funding of $480,000 for each of three years for the coordinated programs of ALPS. The fund is administered by a joint committee of Alberta SPCA, AFAC board members and the provincial government. The four program areas are:

- livestock care response and enforcement service - **ensures compliance with animal welfare legislation, emphasizing enhanced preventative action by trained resource people.**
- data collection and benchmarking service - **provides information to objectively identify problems, track improvement and successes and have accurate facts to communicate.**
- education and training - **provides producers, handlers and special constables the most current information on animal handling methods.**
- public awareness **provides public information about the responsible care and handling of farm animals.**

Contact: Neil McDonald
(403) 447-3600
Ray Fenton
(403) 427-4615
Susan Church
(403) 932-8050

Rats – not for sale in Alberta

An incident at a north eastern Alberta pet shop prompted Alberta Agriculture, Food and Rural Development to remind Albertans that *pet* rats of any kind are not allowed in Alberta.

"The manager of the pet shop selling young rats as pets, believed they were legal for sale in Alberta," says John Bourne, vertebrate pest specialist with Alberta Agriculture, Food and Rural Development. "As it turned out, he was unaware that possessing live rats in Alberta is illegal. The pet show supplier was aware that rats are not allowed in Alberta and apologized for the inadvertent shipment of rats to the pet shop. Five of the six animals in question were recovered by municipal and provincial authorities and the sixth had been used for snake food."

The provincial rat control program began over 48 years ago. The possession of live rats became illegal when rats were officially placed on the 'agriculture pest' list. This law remains unchanged today – *No person shall keep, sell or purchase*

Cont'd on page 3

live rats unless he is in possession of a permit issued by Alberta Agriculture, Food and Rural Development.

This law applies to laboratory, pinto, hooded or collared rats that are all derivations of the Norway rat. The only exception to this rule are specified institutions that keep rats for research purposes such as universities, authorized by the Department to keep laboratory rats, that are really Norway rats.

The Department receives many inquiries each year from the public about keeping rats in Alberta. Most inquiries involve people moving to Alberta and wanting to bring their pet rat with them. A few inquire about keeping rats to feed to their pet reptiles or for school menageries or displays and other assorted reasons.

"Rats are one of the most destructive pests known to man," says Bourne. "Throughout history, rats have ravaged mankind from the earliest recordings of stored grain famines to the infamous black death plague of the middle ages. In Canada, rats cause millions of dollars of loss through structural damage to farm buildings and other structures as well as the consumption and contamination of grain, feed and foodstuffs. Also, rats are carriers of many infectious diseases of livestock, pets and humans. Rats are very prolific; a pair of rats can produce over 10,000 offspring in less than two years."

The Department operates a well-developed rat-control program that annually spends over a quarter of a million dollars to keep rats out. The program has been very successful and Alberta is known world-wide for being rat-free. Several articles and publications are written or televised annually on the success of Alberta's rat control program.

Contact: John Bourne
(403)853-8225

Alberta farms are becoming safer places to grow

What month of the year is the most risky to work on a farm? If you picked May, you're right – at least, as far as the new 1997 statistics indicate. Last year, there were 1,385 farm-related injuries reported. That's down over 15 per cent from the 1,637 injuries reported in 1996.

"A majority of these injuries are cuts, bruises and broken bones," says Solomon Kyeremanteng, farm safety program manager, Alberta Agriculture, Food and Rural Development. "While the numbers are still less than stellar, they are most certainly a step in the right direction."

In 1997, there were 17 fatalities on Alberta farms, down from 21 in 1996, a 20 per cent reduction. "Injuries on the farm may not completely disappear," says Kyeremanteng, "But each of those fatalities was preventable. Again, the figures are down and that's a positive sign."

For the second straight year, there were more injuries from livestock (43 per cent) than injuries from machinery (29 per cent)

Other 1997 statistics gathered from Alberta hospitals reporting to the Farm Accident Monitoring System include:

- over 50 per cent of livestock injuries involved the handling of cattle;
- for machinery, tractors were involved in the most injuries, followed by augers;
- fingers and thumbs were the body parts most often injured;
- 18 to 34 year olds reported the highest number of injuries;
- 80 per cent of the injuries involved males; and,
- children accounted for over 14 per cent of total farm related injuries.

Recently, a new CD-ROM called *Lost on the Farm*, a farm safety adventure game, was distributed to rural elementary schools across Alberta. "Programs such as this will go a long way in further reducing farm injuries in Alberta," adds Kyeremanteng.

Contact: Solomon Kyeremanteng
(403) 427-2171

Mild, dry winter weather continues in February

February had above normal temperatures and below normal precipitation totals.

"February started with above normal temperatures the first week," says Peter Dzikowski, agri-weather specialist with Alberta Agriculture, Food and Rural Development. "Warm temperatures continued into the second week of February in the Peace and central regions. Temperatures soared well above normal in southern Alberta where daily maximum temperatures reached 10 to 15 degrees C. During the last two weeks temperatures remained near to above normal."

The provincial average temperature was 4.8 degrees above the 1961 to 1990 average of -9.3 degrees C. Most Alberta locations reported monthly average temperatures 1.5 to 9.3 degrees above normal.

"Except for the first two weeks in January, the 1997/98 winter is shaping up to be one of the mildest on record," says Dzikowski. "November, December, the last half of January and February had warm, dry conditions typical of what can be expected in Alberta when El Nino occurs. February's temperature departures from normal were similar to the departure reported for December."

Cont'd on page 4

February's greatest temperature departures, about 4.5 to 9.3 degrees above normal, were reported in the northeast and northwest regions.

Banff reported the smallest temperature departure, 1.6 degrees warmer than the monthly normal temperature of -5.4 degrees.

The provincial average precipitation of 4.9 mm was 12 mm below the 1961 to 1990 average of 16.9 mm. These averages are based on data recorded at 48 Environment Canada climate stations across Alberta.

"The Peace region was the wettest reporting only half of February normal precipitation. Amounts of 4.4 to 20.6 mm, or 10 to 74 percent of normal were reported. All other regions reported less that one third of normal February precipitation," adds Dzikowski.

You can find more details at the Ropin' The Web Internet site at: **http://www.agric.gov.ab.ca/climate**

You can find more information on typical El Nino conditions at Environment Canada's Internet site at: **http://www.mb.ec.gc.ca:80/Nino/ENSO_English_top_page.html**

Contact: *Peter Dzikowski*
(403)427-3594

FBMP calls for proposals

The Canada/Alberta Farm Business Management Program (FBMP) is accepting applications for projects. Activities covered in this programming year can begin immediately and run until March 30, 1999, anywhere in Alberta.

"All types of management programming is considered for funding," says Anita Lunden, FBMP coordinator. "Funds are available for classroom training and for distance delivery training. Distance delivery includes everything from Internet courses to cassette tapes a farm manager can listen to at home or while working. Also considered for funding are research projects from the private sector or from public sector agencies."

Of special interest to FBMP are proposals that come from producer groups. Several management clubs have been funded in the past and are eligible again this year.

"It is encouraging when farm managers take control of what they want to learn and come to us with a plan. Financial support can make the plan a reality," says Lunden.

FBMP will also consider proposals from commodity groups, as long as they contain a management focus.

"In the past, commodity groups' applications often dealt with production issues," adds Lunden. "That is not our mandate. If the group needs help with a project dealing directly with farm business management, it will be considered carefully."

In order to be eligible for funding, projects must fall within one of the four management priority areas of FBMP. These priority areas include: managing change and management mind set; environmental and societal; marketing; or technology and information transfer.

A complete package outlining the philosophy of FBMP and the requirements for funding is available from Lunden's office, call (403)556-4218 (dial 310-0000 first for toll free access). Application forms can also be downloaded off the Internet. The Internet address is

http://www.agric.gov.ab.ca/economic/mgmt

Potential applicants are urged to act quickly as funds are limited.

Contact: *Anita Lunden* *Arla Trueblood*
(403)556-4218 *(403)954-3745*

Money for STARS and the 4-H Foundation

The last calf to sell at the upcoming Lakedell 4-H Beef Achievement Day Show and Sale will be a special one. The proceeds from it's sale will be donated to the Alberta Shock Trauma Air Rescue Service Foundation (STARS) and the 4-H Foundation of Alberta.

Donations for purchasing the calf came from Vold Jones and Vold Auction, Lakedell Beef Symposium, Perry and Dalyce Sunquist, and Fred and Carolyn Gainer. Neil and Joan Stone donated the hay. Insurance on the calf was sponsored by Cooperators and the feed came from Calmar Feeds. The calf is being cared for by the Gist family.

"4-H members decided to sell the calf at the end of the sale because, in the past, that calf has brought in the most money," says Janet Stone, leader, Lakedell 4-H Beef Club. "Our members are frequent visitors to the Alberta 4-H Centre at Battle Lake and we'd like to help out the 4-H Foundation of Alberta with their wish list."

"STARS was chosen as the other recipient of the proceeds because of the important service it offers rural Albertans in times of need," adds Stone.

STARS is a non-profit, volunteer-supported organization that provides emergency helicopter ambulance service at no cost to the patient. STARS is designed to work with existing emergency services in rural communities. Critically ill patients and those with life-threatening injuries are cared for and flown from outlying areas of southern and north-central Alberta to urban hospitals with more extensive treatment facilities. Over 90 per cent of Alberta's population can be reached by STARS helicopters and medical personnel.

Cont'd on page 5

The crews consist of a pilot, a co-pilot, a critical care nurse and a paramedic. This team is on standby 24 hours a day. A specialty physician is also available when needed. As a result, STARS can respond within 10 minutes of being dispatched.

Since 1985, STARS has flown over 5,000 missions. Many are to accident scenes, including motor vehicle, industrial and agricultural accidents. It also transfers patients in need of higher levels of medical care from rural to urban hospitals. These patients could be suffering medical conditions such as cardiac difficulties or be accident victims previously taken to rural hospitals. The STARS helicopters are also capable of carrying transport incubators for premature infants in distress.

"STARS, appreciates being the charity of choice for several Alberta 4-H clubs over the past couple of years," says Chris Maxwell, volunteer coordinator with STARS. "We're impressed with the philanthropic character of 4-H'ers. These young Albertans deserve recognition for their efforts to help others."

The Lakedell 4-H Beef Club show and sale will be held Saturday, April 18, 1998 at the Lakedell Recreation Complex (½ mile south on Lakedell Centre Road, Westerose). The show starts at 9:30 am with the sale beginning at 3:00 pm.

Contact:	*Carol Sullivan* *(403)422-4H4H*	*Janet Stone* *(403)586-2363*

Agronomic mapping

Precision farming technology is the fastest growing area of Global Positioning System (GPS) technology. Over 17,000 combine yield monitors have been sold in North America since 1994, with over 165 of them in Alberta. Seed equipment manufacturers are offering variable rate fertilizer and seed options for site specific application. The alternative to uniformly applied inputs is managing each area in a field according to its unique weeds or soils characteristics. GPS has given farmers the ability to precisely locate a field area and apply inputs to specific areas.

"Soil types, weed populations, micro-climates and yield vary across fields," says Ty Faechner, crop specialist - cereals and oilseeds, with Alberta Agriculture, Food and Rural Development. "Current agronomic practices involve uniform application of inputs to whole fields despite variability. A *Farming for the Future* project investigated weed mapping, soil compaction mapping and demonstrated various GPS tools that are applicable."

Linear scouting for Canada thistle gave the best results for mapping weed infestations. Cereal, oilseed and pulse crops near Spruce Grove, Leduc and Olds were mapped for Canada thistle using an ATV (all-terrain vehicle) mounted with differential GPS. A quarter section (160 acres) field can be mapped in two hours with an ATV speed of 25 kph. Tagged weeds need to be visible within the crop canopy to afford reliable control. Fields were mapped at the six to seven leaf stage of the cereals, flowering stage (8-10 nodes) of peas and the pre-bolting stage of canola. No crop damage due to wheel tracks was observed after three to four days.

"Penetration resistance was measured using a manually operated recording penetrometer and geographic locations were recorded at these locations," adds Faechner. "Mapping soil penetration resistance was inconclusive regarding placement of soil remediation practices such as deep ripping and lime application. However, a clearer picture of how soil penetration varies across topography and landscape was obtained when used in conjunction with yield maps."

Penetration resistance measurements hold some promise for the delineation of landform areas within a field. With temporal and spatial variation of penetration resistance, it was suggested measurements need to be recorded at various times throughout the growing season.

Contact:	*Ty Faechner* *(403)963-6101*	*Roger Andreiuk* *(403)986-8985*

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 6437

Agri-News Briefs

New beef specialist in Olds

Jeff Millang has joined Alberta Agriculture, Food and Rural Development as the new beef specialist in Olds. Millang was raised on a purebred Charolais farm in the Camrose area. He graduated from the U of A in 1987 and worked seven years as district agriculturist in Three Hills and Coronation. For the past three years, Millang was the farm management specialist at Stettler. He has been involved with several applied research project over the years and his expertise and experience in beef production, marketing and farm finance will benefit beef producers in the Olds area. Special interests include using computer and Internet technology and helping farmers use these new technologies as tools in their businesses. "I'm looking forward to working with producers in nutrition, production management, facilities, costs of production, genetics and production records and analysis," says Millang. He can be reached at the Olds district office (403)556-4220.

Scholarship for agriculture or home economics extension

The David Butchart Pope Scholarship was established for the encouragement and assistance of young people from Alberta farms to attend extension courses in agriculture or home economics study at the U of A. Preference is given to members or former members of boy's and girl's clubs (4-H) for farm children. The scholarship was established by a bequest to the U of A by David Anderson Pope in memory of his son David Butchart Pope. Applications are invited from young men and women from Alberta farms. The David Butchart Pope Scholarship award is an amount equal to the total cost of course tuition for extension course in the Faculty of Extension, transportation and accommodation, up to a maximum of $500. Further information and an application form are available on the U of A extension Internet site at: **http://www.extension.ualberta.ca/erm/dbp_form.html**

Livestock care conference

The Alberta Foundation for Animal Care is coordinating the Livestock Care Conference '98 – industry growth and animal welfare. The conference is being held at the Crossroads Hotel in Calgary on March 27, 1998. Topics covered include: animal welfare and agriculture, livestock transportation, impact of consumer demands and activists' threats, and preparing for the future. The day's activities also includes a question and answer session where attendees can ask questions of the conference speakers. Registration is $75 (includes GST). For further information, contact the AFAC at (403)932-8050; fax (403)932-8052 or e-mail **afac@cadvision.com**

Organic producers workshop

The Alberta #1 Chapter of the Organic Crop Improvement Association (OCIA) is sponsoring a workshop for organic producers and those interested in becoming certified organic producers on April 18, 1998 at the Legion Hall in Stony Plain. The workshop will deal with topics of certification process, the audit (paper) trail, inspector requirements, post inspection needs, soil balancing, weed and insect control and changing the farming philosophy. Presentations by workshop speakers Irene Mihailuk, Chapter secretary, and Dave LePine B.Sc., farm training specialist and member of the Certification Committee, will emphasize new procedures. Registration fee is $20 per person. For further information, contact Don Wagner, president OCIA Alberta #1, (403)892-3018, Darwell, or Irene Mihailuk (403)675-5478.

CANADIANA

Aug 1 1998

Agri-News

March 30, 1998

Another hemp symposium planned

A low-THC hemp symposium, held in Red Deer on March 10, attracted 220 Albertans. The symposium sold out quickly and several people wanting to attend were disappointed that registration filled. Based on the enthusiasm and interest of possible Alberta producers, a second ***Low-THC Hemp Symposium*** is scheduled for April 8 at Edmonton Northlands AgriCom.

"In the past three years, there has been a renewed interest in the production of fibre hemp (*Cannibis sativa* L.) in Alberta," says Dr. Stan Blade, plant breeder/agronomist, Crop Diversification Centre – North, Alberta Agriculture, Food and Rural Development. "There is a great deal of interest and speculation in the crop's potential. Expansion beyond traditional crop commodities makes good sense in the global market. Since 1995, fibre hemp research plots were grown in various parts of Alberta to evaluate the potential of this crop for both seed and fibre production."

This research shows that fibre hemp can be successfully grown in western Canada. The crop responds to good soil and good agronomic practices including proper fertilizing and weed control.

"Various potential uses for low-THC hemp and possible markets were discussed at the symposium," says Blade. "The crop hasn't been grown in Canada for 60 years, and in that time, other fibre crops have replaced fibre hemp for most uses. The major uses for fibre hemp are textile, paper-making, hemp fibre board and the potential of hempseed oil.

"We have observed good seed production at some of our research plots in Alberta, and we have several companies in the province capable of pressing this oil, which is high in unsaturated fats and anti-oxidants. The potential for both oil and fiber will be pursued at the Edmonton symposium."

Textiles from fiber hemp are currently available in Alberta. The question is whether local production of these textiles can compete with imported products. The cost of developing a fiber processing industry is high. Markets must be developed and the cost of hemp fiber for commercial use must be kept competitive with other fiber crops (cotton, flax and cereals).

"There are still many production questions that need to be answered before commercial production can be optimized," adds Blade. "The changes in regulations that allow producers to grow low-THC hemp is just a first step."

cont'd on page 2

This Week

Another hemp symposium planned 1

A look at the Crop Diversification Centre – South 2

Alberta's warm, dry, El Nino winter 2

Pigs and public health 3

Animal health lab routine services being privatized 4

U. S. trade 4

Briefs 6

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND

For further information about the ***Low-THC Hemp Symposium*** in Edmonton, contact Wayne Goruk, program development coordinator with Alberta Agriculture, Food and Rural Development, (403)427-3122.

Contact: Dr. Stan Blade
(403)422-1789

A look at the Crop Diversification Centre – South

The Crop Diversification Centre South (CDCS), operated by Alberta Agriculture, Food and Rural Development, has a long partnership with agriculture in the province. In 1935, it was known as the Provincial Horticultural Station. It continues to represent the diversifying nature of the business of agriculture.

"Over the years the Centre's role has changed significantly, says Shelley Barkley, information officer at CDCS. "Demonstration of horticulture crops is still important, however, the Centre's main role is supporting the commercial horticulture and special crops industry in Alberta through applied research projects and information services."

Alberta's horticulture and special crops industries are fast growing sectors in agriculture. Farm gate values are estimated between 350 and 400 million dollars, not to mention a substantial value-added processing sector. Horticulture is generally divided into: fruit crops (strawberries, raspberries, Saskatoons and chokecherries), greenhouse crops (vegetables, cut and potted flowers, bedding plants and tree seedlings), nursery crops (trees, shrubs and sod), potatoes (processing for french fries and potato chips, seed and table stock) and vegetables (vegetables for processing, market gardens and fresh market). Special crops include: dry beans, sugar beets, field peas, lentils, herbs and spices, mints, hemp, ginseng and grass seed.

"Much of the applied research program that the Centre conducts is related to improving production methods for all these crops and includes variety evaluation, weed control, plant disease management and irrigation management," says Barkley. "Staff at the Centre work directly with producers and producer organizations, part of the crop diversification mandate."During it's history, the Centre has been actively involved in the introduction of a number of new crops or crop types to Alberta. Recent examples include; greenhouse peppers, day-neutral strawberries, Saskatoons, essential oil crops and amenity grass seed. Staff have also been involved with projects related to shipping fresh vegetables to Japan, improving the quality of pre-peeled vegetable products and the development of cottage-scale processing.

The Centre is currently co-ordinating a provincial Dutch Elm Disease (DED) prevention program. Alberta is free of DED, however, neighbours to the south and east have the disease and statistics indicate that it is naturally spreading in Alberta's direction. The most important message concerning DED is do not bring firewood into Alberta.

"The Centre has a wealth of knowledge about horticulture and special crops," adds Barkley. "This knowledge is there to be used by the producers, processors, the agricultural service industry and the public. The Centre produces a number of newsletters that are distributed to specific commodity groups. Commodity-based field days are held on a regular basis and are advertised to producers. For Internet users, horticulture and special crops information is available on Alberta Agriculture's website: **www.agric.gov.ab.ca**"

CDCS encourages visitors to the grounds and demonstration gardens, open during daylight hours throughout the year. Visitors can inspect the Golden Prairie Arboretum, a collection of over 500 species of trees and shrubs, all labeled. A rose garden provides a sensational experience. Visitors will also see collections of perennials and annual flowers. A visit to CDCS provides an opportunity to see the most promising new annual flower varieties in the *All America Test Garden*. See first-hand mature size of many trees and shrubs, always useful when deciding what to plant in a particular spot.

Guided tours of research plots are available Monday through Friday 9:00 am to 3:00 pm, except holidays. Tours are by appointment only, arrangements can be made by calling (403)362-1305.

Contact: Shelley Barkley
(403)362-1305

Alberta's warm, dry, El Nino winter

The 1997/98 winter is shaping up to be one of the warmest and driest on record. The provincial average temperature for November 1, 1997 to February 28, 1998 was 2.9 degrees warmer than normal. The provincial average precipitation total for the same period was 36.6 mm, 45 per cent of normal.

"This winter has been the exact opposite of last winter," says Peter Dzikowski, agri-weather specialist with Alberta Agriculture, Food and Rural Development. "In 1996-97, Alberta experienced temperatures well below normal and above normal precipitation.

"The unique aspect of this winter is that the warm, dry conditions were province-wide and persisted for three and a half of the four winter months. November, December, the last half of January and February had warm, dry conditions typical of what can be expected in Alberta when El Nino occurs. The only cold, snowy weather reported occurred in the first half of January."

Cont'd on page 3

In November, monthly average temperatures ranged from one to four degrees above normal. The averages are based on data recorded at 45 Environment Canada climate stations across Alberta.

"December was the warmest and driest on record for several Alberta locations," says Dzikowski. "Most Alberta locations reported monthly average temperatures ranging from four to 12 degrees above normal."

Cold Arctic air dominated the weather the first half of January with daily minimum temperatures reaching -25 to -40 C most nights. Temperatures returned to near normal values the third week of January. The month ended with a return to above normal temperatures.

Warm, dry conditions continued in February as temperatures soared well above normal in southern Alberta where daily maximum temperatures reached 10 to 15 degrees C. During the last two weeks temperatures remained near to above normal.

"Precipitation totals for the four months November to February, add up to only 18 per cent of the annual total precipitation in Alberta. But, keep in mind that winter is our dry season," adds Dzikowski.

You can find more details on Alberta Agriculture's website at: **http://www.agric.gov.ab.ca/climate**

Contact: *Peter Dzikowski*
(403)427-3594

Pigs and public health

Human infection from pig parasites is uncommon in Canada, even among pig producers. With our current production systems, the general public is not likely to be exposed to or become infected by any diseases of pigs. However, handling pigs or pig manure without exercising adequate hygiene or drinking untreated surface water might expose people to some risk of illness.

"A public risk can exist if pig manure is not handled and disposed of properly, and surface or groundwater contamination occurs," says Dr. Julia Keenliside DVM, provincial swine veterinarian with Alberta Agriculture, Food and Rural Development. "The guidelines set for the handling of pig manure and for intensive livestock operations in Alberta were specifically designed to guard against occurrences that could lead to contamination of groundwater."

Some of the concern has been over parasites, such as giardia and cryptosporidium entering the water supply, and from exposure to eggs of the pig roundworm when manure is spread on the land.

Pig roundworm (*Ascaris suum*) – this parasite can infect humans when infected pig manure is handled without taking sanitary precautions such as hand-washing. In Canada, cases have occurred when toddlers handled pig manure in gardens so caution should be exercised when exposing children to infected manure. Infection may produce no symptoms but can sometimes cause illness. The human immune system generally prevents eggs from developing, however, ingestion of a large number of eggs will cause infection. Pig roundworm infection is very rarely reported in Canada, even in people who routinely handle pigs and manure. The worm is easily controlled on the farm through medication and roughly 70 per cent of the pigs marketed in Alberta are free from this parasite.

Giardia (Beaver Fever) – this parasite is common in livestock, wildlife and pets and is found even in pristine watersheds. Giardia can cause diarrhea and illness in humans, which can last several days or weeks. Outbreaks are caused by breakdowns in water treatment facilities or sewage contamination of the water supply. Direct transmission from livestock to humans has not been proven, so livestock's role in human infection is unclear.

Cryptosporidium (Crypto) – is common in livestock, wildlife and pets. It can cause diarrhea and illness lasting several days to weeks. Outbreaks are associated with fecal contamination of drinking water, often human sewage. Sometimes it's difficult to determine the source of contamination, and livestock contamination has been suspected as a source. Because pigs are usually housed indoors and manure is contained, they represent less risk of watershed contamination than livestock that is allowed direct access to streams and rivers. Evidence shows that strains of Crypto from livestock can infect humans. While the Crypto parasite is very small, it can normally be filtered out by municipal water-filtration systems. Concerns arise when contaminant loads become very high, which may allow crypto to get through the water treatment process.

"While these parasites can infect humans, the risk from pigs must be kept in perspective," adds Keenliside. "Those at highest risk, the people working inside pig units and veterinarians, rarely report illness from these parasites.

"Everyone should be aware that household pets also harbor similar parasites, including roundworms, giardia and Crypto. All types of feces, whether from pets, livestock or wildlife present risk and should be handled hygienically to prevent illness."

Contact: *Dr. Julia Keenliside, DVM*
(403)427-4614

Animal health lab routine services being privatized

The role of the Animal Health Laboratories (AHL) branch of Alberta Agriculture, Food and Rural Development is changing. For 58 years the labs have accepted animal submissions for routine post-mortem examination. This is one of the services to the livestock industry that has changed in recent years.

"New international trade agreements have increased demands to provide information about the health status of all animals in the province," says Dr. Cornelia Kreplin, manager of the AHL branch. "The focus of the branch is changing to produce information that is needed more and more to sustain domestic and international market access and to support improved competitiveness of livestock and livestock products."

Several other trends in Alberta livestock industries contributed to the decision of the AHL's move toward becoming a surveillance organization. These include a change in the focus of private veterinary practice in the province. Many veterinarians in Alberta have developed specialized knowledge in livestock groups, such as feedlot animals, cow/calf, dairy and swine. In addition, there has been a substantial growth in the number of private veterinary diagnostic labs in the province.

"The private sector in Alberta can now provide the majority of routine veterinary diagnostic services," says Kreplin. "The examination of portions of animals and animal fetuses was handed over to private labs in November, 1996. Starting April 1, 1998, all animals for routine post-mortem examination will no longer be accepted by government labs. Routine post-mortem will be carried out by private practice veterinarians with support from private veterinary diagnostic labs."

Provincial AHLs will continue to ensure all essential veterinary diagnostic services are available to Alberta's livestock producers and veterinarians. Staff in all four locations will be available to answer questions, provide assistance with post mortems in difficult cases and continue to perform testing not available in private laboratories.

"As of April 1, government labs will focus resources and activities on surveillance of key livestock diseases such as Salmonellosis, Johne's disease and Porcine Reproductive and Respiratory Syndrome (PRRS)," adds Kreplin. "Diseases such as these have the potential to limit production efficiency and become a barrier to trade. They are considered important on a provincial level. Provincial labs will also pursue the development and application of new tests to establish the incidence and distribution of specific diseases within the province."

For further information regarding animal health lab services, contact:

Dr. Cornelia Kreplin	Edmonton	(403)427-6406
Dr. Mary Vanderkop	Lethbridge lab	(403)381-5190
Dr. Jim Henderson	Fairview lab	(403)835-2238
Dr. Jim Hanson	Edmonton lab	(403)422-1923
Dr. Jane Pritchard	Airdrie lab	(403)948-8575

Contact: *Dr. Cornelia Kreplin*
(403)427-6406

U.S. trade

Often, members of the Government of Alberta, including those with Alberta Agriculture, Food and Rural Development, talk about tremendous market opportunities overseas. Alberta has a lot to offer places such as Japan and China, and those countries can offer many things in return. It's certainly not a market to ignore. But while forging this relationship, we must not forget about the United States – Alberta's number one trading partner.

In 1997, Alberta exported $5 billion worth of agri-food products, almost half of which ($2.44 billion) were shipped to the United States. The majority of exports are shipped throughout the Pacific Northwest, including Idaho, Montana, Oregon, Washington and Alaska.

"The Pacific Northwest has also become an important springboard for Alberta products being shipped to Asia and the Russian Far East," says Ed Stelmach, Minister of Alberta Agriculture, Food and Rural Development. "Numerous Asian and Russian trading companies based in Seattle and Portland are purchasing from Alberta for these markets. Increased purchasing and increased exports translate into an increase in jobs.

"When such a huge trade relationship exists, it stands to reason that there are going to be a few irritants here and there. Agriculture and food tend to have particular sensitivities and in this case more so, as the majority of trade is competitive rather than complementary. There's no question that it's in the best interest of both the U. S. and Canada to clear the air of irritants whether they deal with the import and export of sugar, potatoes, wheat, barley, hogs, cattle and, of course, dairy and poultry. Recognizing the importance of market access and exports to our growing agriculture and food industry, Alberta has been, and will continue to urge the federal government to negotiate a comprehensive free trade agreement with the U. S.in order to avoid these irritants, and more importantly, to facilitate the growing trade of agriculture. Of course, such an agreement will have to consider appropriate mechanisms and time lines for adjustment on both sides of the border."

"It doesn't hurt to let the Americans know how the

Cont'd on page 5

Government of Alberta feels about trade issues and that we don't have to follow the beat of our drummer, which in this case, is the federal government," continues Stelmach. "In late February, I visited Washington, D.C. While there, I had a chance to talk with a number of people directly involved in trade initiatives such as the World Trade Organization (WTO), Asia-Pacific Economic Conference (APEC) and the North American Free Trade Agreement (NAFTA).

"I covered a wide range of issues with Senators and Congressmen and Administration officials. We had excellent exchanges, particularly when talking about the Canadian Wheat Board (CWB) and grain trade issues. The Americans are determined, it would seem, to make the CWB a trade negotiations issue. My message in Washington was that Alberta is committed to free trade and favors a comprehensive approach to trade negotiations in agriculture and food. The support received was quite positive. I frequently took the opportunity to explain Alberta's fiscal disciplines and its results along with our policy of reduced government intervention in agriculture and the economy in general. All in all, our American friends were well briefed on Alberta's economy and stature within Canada. The reception we received throughout our stay bodes well for future talks with influential people in Washington."

For more information about U. S. trade or other issues, contact Mr. Stelmach's constituency office (403)632-6840 or Edmonton office (403)427-2137. A toll-free call can be made by dialing 310-0000 then the seven-digit number.

Contact: *Ron Glen*
(403)427-2137

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 6551

A list of Alberta's Farmers' Markets

The new 1998 Alberta Farmers' Markets guide is now available. The guide lists 100 Farmers' Markets that are open weekly throughout the province. While days and hours of operation differ, Farmers' Markets have many things in common. At the markets, a variety of Alberta-grown agricultural products, such as vegetables, fruits, eggs and meats can be found. Many markets feature Alberta-processed jams, jellies and relishes as well as baked items and international specialties. Handcrafted items, made by Albertan crafters, can also be found. The guide is available, free of charge, at all Alberta Agriculture, Food and Rural Development offices. For further information about Alberta's Farmers' Markets, contact Simone Demers-Colins at (403)422-1789 or e-mail: **demers@agric.gov.ab.ca**

Nutrient requirements of swine international satellite symposium

The National Research Council's (NRC) 10th edition of the ***Nutrient Requirements of Swine*** will be released via an international satellite symposium originating at Iowa State University, April 14 and 15, 1998. The program is targeted toward professionals in swine production. Authors of the 10th edition will evaluate nutrient requirements for growth and reproduction; mineral, vitamin and water requirements; and, minimizing nutrient excretion. This edition includes the NRC book plus a *Windows*™ software package to help estimate nutrient requirements for all stages of production. In addition to eight hours of satellite time, downlink site programs will use case studies to familiarize attendees with the software. The Alberta Pork Research Centre will host a downlink site at the University of Alberta. This site is one of 25 sites across North America. Pre-registration for the two-day symposium is $150 (plus GST). Continuing education credits have been approved for members of the Alberta Veterinary Medical Association. Participants are encouraged to bring a laptop computer. For information on attending the *International Symposium on the Nutrient Requirements of Swine* at the University of Alberta, contact Michelle Follensbee (403-415-0828); fax (403-427-1057).

A forum for sharing

The National Agriculture Awareness conference – ***A Forum For Sharing***, is scheduled for April 5 to 7, 1998 at the Best Western Village Park Inn, Calgary. The conference is coordinated by the Alberta Agriculture in the Classroom program in partnership with the Alberta Agriculture Education Network, Canadian Federation of Agriculture and Agriculture and Agri-Food Canada. This series of workshops and sharing sessions present a unique opportunity for sharing ideas, materials and resources. Registration is $200 per person. For further information, contact Donna-Rae Coatta at (403)427-2171.

Food Processor's Federation of Northeast Alberta

An open-house to showcase a profile of the proposed shared-use food processing facility and present a project update is planned for April 6, 1998. The Food Processor's Federation of Northeast Alberta have arranged for the reception to begin at 6:30 p.m. at the multi-purpose room of the Recreation Centre in St. Paul. The Federation is a not-for-profit corporation comprised of northeast area agricultural producers, food processors and other interested entrepreneurs. The goal is to establish a shared-use, federally inspected, food processing facility in northeastern Alberta. The open-house for area residents is an opportunity to discover what this project could mean to the area and the benefits that may be realized from it. For more information and to confirm attendance, contact Morley Kjargaard at (403)645-6301. Government numbers are toll free by dialing 310-0000 first.

Agri-News

APR 8 1998

April 6, 1998

Irrigation Act – recommendations for change

On March 9th, the Standing Policy Committee on Agriculture and the Environment approved the final report and recommendations of the Irrigation Act Review Committee.

Last June, Ed Stelmach, Minister of Agriculture, Food and Rural Development appointed MLAs Glen Clegg, Ron Stevens and Ron Hierath to an MLA review committee to examine the province's legislation governing irrigation in the 13 irrigation districts in southern Alberta. This Act, proclaimed in 1968, established the rules and procedures for the orderly formation, operation and dissolution of the districts.

"The Irrigation Act needed to be reviewed as part of the Klein government's commitment to assess all legislation by 1998," says Stelmach. "The legislation is almost 30 years old and a lot has changed in the irrigation community since 1968."

Public meetings were held in Taber, Picture Butte and Brooks last July. From these meetings and written submissions, the review committee got a sense for what the issues or concerns were with the current legislation. Based on this input, they developed a draft report and policy recommendations. The draft report was mailed to everyone who had participated in the process or requested a copy.

In November, the review committee met with the Alberta Irrigation Projects Association, representatives of the districts and Irrigation Council. They also received 17 written submissions in response to the draft report. The final report and recommendations of the committee were based on the feedback received.

Some of the changes recommended by the review committee are:

- The new Act, named the Irrigation Districts Act, signifies that it governs irrigation within districts. Alberta Environmental Protection also licenses over a quarter million acres of private irrigation outside the districts, to which the legislation doesn't apply;

Cont'd on page 2

This Week

Irrigation Act – recommendations for change 1

Leaf and berry spot disease of Saskatoon berries 2

Volunteers – the heart of 4-H 2

Does El Nino mean drought in Alberta? 3

Free & Easy helps teachers spin information webs 3

Mineral nutrition for beef cows 4

Briefs 5

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
RURAL DEVELOPMENT

- The role of Irrigation Council will change. Rather than approving many of the day to day activities of the district boards, the Council will monitor the operation of the districts, the maintenance and condition of the irrigation works and the financial performance of the districts, based on annual reports submitted by the districts. Council will also hear all appeals, except those involving compensation, which will go before the Land Compensation Board;
- Water rates to non-irrigators will be appealable;
- Irrigators will be allowed to move water entitlements between their own parcels of land, on an annual basis. This will enable them to rotate crops which cannot be grown on the same land two years in a row, due to risk of disease or pests;
- If the Boards wish, they can now appoint members who are not irrigation farmers;
- Boards will have a means of taking action if a water user is wasting water; and,
- Boards will be required to submit five-year seepage control plans and update them at least every three years. Priority will be given to addressing seepage on non-irrigated lands and landowners will be able to appeal the plans for their district.

The final report is being mailed to everyone who received a copy of the draft, and those who have asked to be put on the mailing list. To receive a copy, contact Len Fullen, project manager, Policy Secretariat, Alberta Agriculture, Food and Rural Development, 7000 - 113 Street, Edmonton, AB T6H 5T6, phone (403)422-2070, fax (403)422-6540 or e-mail fullen@agric.gov.ab.ca

A draft bill is being tabled during the current sitting of the Alberta Legislature. The draft legislation will be available in early summer for review and comment. New legislation is expected to be enacted during the 1999 spring sitting of the Legislature.

Contact: Len Fullen
(403)422-2070

Leaf and berry spot disease of Saskatoon berries

Since 1990, the Saskatoon berry industry has been seriously threatened by a leaf and berry spot disease caused by a fungal pathogen, *Entomosporium mespili*. Known also as Entomosporium disease, it causes yellowing and ultimately pre-mature falling of leaves and spotting, cracking, and deformation of fruit.

"Saskatoon berry is becoming an important fruit crop for the Canadian Prairies. The acreage devoted to the crop is increasing annually," says Dr. Piara Bains, plant pathologist at the Crop Diversification Centre - North (CDCN), Alberta Agriculture, Food and Rural Development, Edmonton. "Entomosporium's effect on the fruit's appearance can cause marketing problems for Alberta growers. Saskatoons are handpicked and sold via the "U-Pick" marketing system, for which an aesthetically pleasing product is an important requirement. Alternatively, the fruit is mechanically harvested for processing into pie fillings, jams, jellies and syrups. Commercial food processors, who are the major purchasers of the mechanically harvested saskatoon, also require an assured supply of high quality fruit."

Entomosporium disease flourishes under wet conditions. Cultural operations that increase air movement through the orchard will help to reduce the disease. Research conducted at CDCN, has resulted in the registration of Topas 250E (propiconazole) and Kumulus DF (sulphur) to control leaf and berry spot disease of Saskatoon. Topas, a systemic fungicide, is registered for a maximum of three sprays at white tip, petal drop and green fruit stage, and with a 38 day pre-harvest interval. Kumulus, a contact fungicide, has a pre-harvest interval of one day.

"Early Topas applications will keep the pathogen population in check and inhibit the spread of the disease," says Bains. "If weather conditions are very favorable for disease development, after the final Topas spray, Kumulus can be applied to control the disease. Use of a systemic and a contact fungicide combination is an effective way to control the disease and reduce the development of resistance in pathogens to fungicides. Always apply fungicides according to the label instructions."

Different Saskatoon berry cultivars have varying levels of field susceptibility to natural infection by *E. mespili*. Disease observations taken at CDCN indicate that overall, Parkhill, Success, and Thiessen were comparatively less susceptible than Forestburg, Honeywood, Northline, Pearson, Pembina, Regent and Smoky.

Contact: Dr. Piara Bains
(403) 415-2302

Volunteers – the heart of 4-H

National Volunteer Week in Canada, April 19 - 25, 1998, is dedicated to volunteers of every kind. It is held to recognize the valuable and significant contributions volunteers make to our society.

"Volunteers are the heart of Alberta's 4-H program," says Mahlon Weir, head of the 4-H Branch, Alberta Agriculture, Food and Rural Development (AAFRD). More than 2800 leaders donate time and expertise to 4-H in the province. They encourage young Albertans to Learn To do By Doing through club projects, communication and leadership activities."

Cont'd on page 3

4-H members and their families, together with the 4-H Branch, the Alberta 4-H Council and the 4-H Foundation of Alberta, salute 4-H leaders and community supporters for their dedication. "The extent to which our volunteers contribute to the 4-H program can't be over emphasized," adds Weir.

The 4-H program is also enriched by the financial and in-kind donations of facilities and volunteer time from organizations such as agricultural societies, recreation boards and local businesses. This support enables 4-H members, leaders, and council members to hold meetings, livestock sales, camps and other activities. Members and leaders also receive community sponsorship to attend events away from home.

Alberta's 4-H program has leaders celebrating 35 years of involvement in the program. Many sponsors have remained committed to 4-H since the program began over 80 years ago. Together they make 4-H . . . more than you ever imagined!

For more information on Alberta's 4-H program call (403) 422 4H4H or visit the 4-H website at:
http://www.agric.gov.ab.ca/ruraldev/4h/index.html

Contact: Carol Sullivan
(403)422-4H4H (4444)

Does El Nino mean drought in Alberta?

El Nino has become a household word this past winter. The large area of the equatorial Pacific ocean with above normal surface water temperatures contributed to unusual weather patterns in many parts of the world. In Alberta, and in many parts of Canada, above normal temperatures and below normal precipitation were common this winter. The dry winter, and below normal fall soil moisture in southern Alberta, has raised concerns about drought this summer.

"Many Albertans are wondering if El Nino means drought in Alberta," says Peter Dzikowski, agri-weather specialist with Alberta Agriculture, Food and Rural Development. "The answer depends on what you look at. If you look at spring runoff, especially from the plains rather than the mountains, then the answer is yes. If you mean agricultural drought, which usually means growing season rainfall, then the answer is no."

It is possible that parts of Alberta may experience drought conditions during some part of the 1998 summer. However, there is no solid basis on which to forecast agricultural drought conditions in Alberta for the spring or summer of 1998. Climate analysis by Environment Canada of spring and summer precipitation following El Nino events revealed no consistent evidence of widespread below normal rainfall in Alberta.

"Fall and winter conditions, especially in southern Alberta, have left many dryland growers more susceptible to the effects of a drier spring or summer," says Dzikowski. "The soil moisture reserves that help carry crops through dry periods, are not as good as many would like, but are part of the climate of the region."

The good news is that the effect of El Nino on Alberta usually diminishes during the spring. The return to more normal winter-like weather in March is not proof of this. However, climate analysis by Environment Canada indicates that both temperature and precipitation in Alberta generally return to near normal in the spring and summer after an El Nino event

"The prudent approach is to prepare for drought conditions as a general risk management strategy," adds Dzikowski. "If there is information, either based on your own conditions, such as soil moisture or rainfall records, or a good long lead forecast for several months or a season ahead, then increase your level of preparedness accordingly. Planning for drought is one way to reduce its harmful effects and minimize the economic impact and hardship it can bring."

For more information on long lead seasonal climate forecasts and Environment Canada's El Nino analysis, visit the Alberta Agriculture's website at:
http://www.agric.gov.ab.ca/links/climate.html

Contact: Peter Dzikowski
(403)427-3594

Free & Easy helps teachers spin information webs

On March 11, at the University of Alberta, 53 urban teachers and student teachers participated in a unique professional development opportunity. Free & Easy '98 is designed to give teachers information on the how and whys of Agriculture that can be used in classrooms to build a better understanding of Alberta's agriculture industry.

"Decisions are based on webs of information formed by a lifetime of experiences," says Betty Gabert, coordinator of the Ag in the Classroom program with Alberta Agriculture, Food and Rural Development. "These webs are unique to each person and they continue to grow and change as new information and experiences are added. The message delivered to teachers at this year's event was that today's food supply depends on hi-tech science. The Faculty of Agriculture, Forestry & Home Economics hosted hands-on labs and mini-lectures on food quality and production."

Discussions on classroom applications and support strategies rounded out the day that introduced the many resources available to teachers. Each participant received a kit that includes 3,000 pages of lesson plans and support resources.

Cont'd on page 4

"This event is offered to teachers at no cost," says Gabert. "A long-standing partnership between Alberta Agriculture, Food and Rural Development, the UFA and the U of A provides Free & Easy to give teachers first-hand experience and understanding of the agriculture industry."

A second part of this program gives 12 of the Free & Easy participants an opportunity to enjoy an agriculture industry tour and Bed & Breakfast farm stay with UFA members. The tour is planned for May 30 and 31, 1998."UFA has committed more than $180,000 over the eight years this program has been developing," adds Gabert. "Their support in furthering information and understanding of Alberta's agriculture industry is much appreciated."

Contact:	*Betty Gabert* *(403)427-4225*	*Cindy Dixon* *(403)427-4311*

Mineral nutrition for beef cows

Mineral and vitamin supplements are often essential for the overall health of a beef cow herd. Feeding the proper level of required minerals and monitoring intake will go a long way toward ensuring a healthy, productive herd. A basic understanding of ruminant nutrition is important in making decisions regarding minerals.

"There is an overwhelming amount of information and numerous different opinions when it comes to mineral nutrition of a herd," says Brian Koberstein, beef specialist with Alberta Agriculture, Food and Rural Development in Wetaskiwin. "One of the most important things to consider is proper intake levels. Intake levels should be monitored on a regular basis. Intake of free choice mineral is quite variable at best, however, it's often the best that can be done. Ideally, minerals and vitamins would be measured out and administered on a regular basis. While this would guarantee all cattle were getting required amounts of supplements, it would also be very difficult and time consuming in many cases."

For the most effective free choice method, avoid offering more than one mineral or salt alternative at any given time. The 'smorgasbord' approach to mineral supplement is often extremely ineffective. Cattle don't know what they need and basically go to the mineral for the salt. Offering one vitamin/mineral/salt mixture is generally the best alternative. To adjust intake levels, producers can vary the salt level in the mixture.

"Minerals high in phosphorus are often challenging to feed by free choice as the phosphorus sources tend to be unpalatable," says Koberstein. "Producers should choose supplements wisely and carefully. Feed manufacturers have done some very good things with their minerals to improve and regulate intake, however, there are always the exceptions.

"Nutrition is a critical factor through calving season and into breeding. Balanced rations will help meet production goals. Feeding expensive products that aren't necessary can be a huge waste. Local beef specialists can be consulted and will have a good basic look at a herd's nutrition and make recommendations."

Contact: *Brian Koberstein*
(403)361-1240

Agri-News Briefs

ALPACA family event

The Alpaca Livestock Producers and Co-operators Association (ALPACA) have organized a free family event and alpaca show for April 18, 1998 at the Agriculture Centre in Riviere Que Barre. The day will be filled with enjoyable learning events. Instructional displays on alpaca, alpaca products and alpaca ranching include hands-on shearing, tooth trimming, halter training, judging of show animals, fibre and fashion products. The Riviere Que Barre Young People's Youth Group will be on hand to entertain children. The day starts at 9:00 a.m. with demonstrations, show and sale continuing until 5:00 p.m. For further information, contact Mitch Berlinic (403)939-2928 or fax (403)939-7478.

New grains research analyst with AGC

Ms. Brenda Brindle joined the Alberta Grain Commission (AGC) on April 3, 1998 as the new grains research analyst. Brindle has a B.Sc. (Agric) in Food Science and an M.Sc. in Rural Economy. For the past 17 years, she worked for KenAgra Management Services providing grain market and strategic planning advisory services directly to farmer clients and conducting workshops on marketing and small business management. In her position with AGC, Brindle will coordinate and conduct research and analysis required by the Commission and work closely with farmers, farm organizations and government agencies in dealing with grain related issues. The AGC plans to increase its focus on business plan activities and will be conducting meetings and workshops on issues affecting the grains, oilseeds and special crops industry. Brindle's expertise and background are well suited to this change in focus. For further information, contact Brindle at (403)427-3077, Edmonton.

Ginseng annual general meeting & conference

The Alberta Ginseng Association is holding their annual general meeting and conference on April 18, 1998 at the Red Deer Lodge. The agenda includes presentations on research done at Alberta Agriculture, Food and Rural Development's Crop Diversifications Centres (North and South), Alberta ginseng diseases and ginseng growing in Alberta. Discussion of the ginseng industry in B.C. and Saskatchewan are also planned. Registration is $35/person or $50/couple. For more information or to register, contact Ed Stelkovics (403)675-2799, Athabasca.

Growing for market...getting to market

The Fruit Growers Society of Alberta (FGSA) and Alberta Food and Rural Development are coordinating a full-day, hands-on working session on April 25, 1998 at the Neil Crawford Provincial Centre, Edmonton. The fruit industry is growing in Alberta and across the Prairies, and producers are finding that planning is needed to take advantage of increased markets. There has recently been increased interest and growth in prairie fruit production and in offering diverse fruit products to restaurants, retailers and processors. The working session will look at the opportunities, strengths and challenges of the fruit industry and the FGSA. There will be a chance to discuss and build on participant ideas and consider the steps that should be taken to meet emerging market opportunities. Producers are working hard to build a stronger fruit industry on the Prairies, the workshop is an opportunity to work together and network with other producers. Cost of the workshop is $15 and includes morning refreshments and lunch. Registration deadline is April 17 and space is limited to 40 participants so register early. For more information contact Sharon Faye (403)422-2961, Kathleen Ozmun (403)656-3613, or Nadine Stielow, FGSA (403)998-0481.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 6676

APR 1[illegible] 1998

Agri-News

April 13, 1998

Province to consult Albertans on options for livestock regulations

The discussion paper on regulatory options for livestock operations in the province was released for public review by Ed Stelmach, Minister of Alberta Agriculture, Food and Rural Development (AAFRD) on March 30, 1998.

"Back in January, I asked my staff to draft different regulatory options for consideration," says Stelmach. "They've come up with various options that should generate good public discussion on the issue."

The discussion paper is a response to concerns expressed by municipal governments, livestock developers and private citizens regarding the current process for approval of new livestock facilities and the framework for monitoring and enforcing the environmental sustainability of existing livestock operations.

Alberta Agriculture staff received valuable assistance from Alberta Environmental Protection, Alberta Health and Alberta Municipal Affairs when drafting the options.

Each copy of the Discussion Paper includes a mail-in questionnaire to solicit as much public input as possible. Open houses and stakeholder meetings will be held in April and May to discuss the options presented, and these meetings will be widely advertised. More information about the consultations is also available on Alberta Agriculture's Internet webpage. The address is:

http://www.agric.gov.ab.ca/economic/policy/ilo.html

"We're open to new ideas and new options, not just what's been identified in the discussion paper," says Stelmach. "We're looking for the broadest possible consultation from all Albertans, not just those involved in the livestock industry."

Alberta Agriculture staff would like to receive responses by June 1, 1998. Results from the questionnaires and public meetings will be compiled into a summary document that will be brought forward to the Standing Policy Committee on Agriculture and Rural Development. Following that, further defined proposals regarding livestock operations and possible regulations will be circulated for consultation [illegible] this fall.

Cont'd on page 2

This Week

Province to consult Albertans on options for livestock regulations	1
Grass seed production research	2
Legislation to delegate administration of Brand Inspection Services	2
Second annual 4-H project fair	3
Student applications for 1998 SFEP and GCP	3
Minimizing calving difficulty	4
MAP – 20 years of excellence	4
Province's best 4-H speaker	5
Briefs	5

Copies of the package are available for interested industry representatives, local government and the public to participate in the process. Anyone wishing to obtain a copy of the discussion paper should call the Policy Secretariat office of Alberta Agriculture (403) 422-2070. Copies are also available at Alberta Agriculture district offices and rural municipal offices around the province.

Contact:	*Ron Glen*	*Mike Pearson*
	(403) 427-2137	*(403) 422-2070*

Grass seed production research

The Peace River region of Alberta is Canada's largest grass seed producing area. It accounts for about half of the total Canadian seed production. In southern Alberta, research into commercial production of Kentucky bluegrass seed is done at the Crop Diversification Centre – South (CDCS) by the forage unit. This group has been exploring the agronomy of irrigated Kentucky bluegrass seed production since 1987.

"Close proximity to US markets and the favorable dollar for export have southern Alberta producers diversifying into amenity and forage grass seed production," says Henry Najda, forage agronomist, CDCS, Alberta Agriculture, Food and Rural Development. "Also, Alberta producers have a history of producing a consistent and quality product, and this strengthens our market position considerably."

The forage unit did a major agronomy project on Kentucky bluegrass seed production under irrigation in cooperation with Dr. Colin McKenzie, soil and water specialist at CDCS. Through its research, the group has been able to make the following recommendations:

- row spacings of 30 to 40 cm are ideal at a seeding rate of 2 to 3 kg/ha depending on the seed size of the variety selected;
- nitrogen fertilizer should be applied in the fall to provide an equivilant of 130 kg/ha (0-60 cm soil N plus fertilizer N) for the first production year and increased to 180 to 200 kg/ha for second and third year production; and,
- irrigation is essential for Kentucky bluegrass seed production but the total water use is lower than for most other irrigated crops.

"Kentucky bluegrass requires burning the field after harvest to remove crop residues for disease and pest control," says Najda. "Burning also allows for a favorable environment for reproductive tillers to develop. As a result, a protocol for burning Kentucky bluegrass seed fields was developed. A video, ***A Safe and Perfect Burn,*** was also produced to demonstrate proper burning techniques."

The video is available at Alberta Agriculture district offices or through the Multi Media Branch, Alberta Agriculture, Food and Rural Development, main floor, 7000 - 113 Street, Edmonton, AB T6H 5T6.

"Another grass currently under investigation is perennial ryegrass," adds Najda. "This grass is not very winter-hardy, however, perhaps with proper management, a single, high-yielding seed harvest would be possible. The group is looking at agronomic considerations such as row spacing and seeding rate, nitrogen requirements and companion cropping."

Companion cropping is usually not encouraged in Kentucky bluegrass seed production, as seed yields the subsequent year can be reduced by as much as 60% depending on the companion crop used. Companion cropping perennial ryegrass with cereals for either silage or grain or fall seeding (up to September 1) after a grain or silage crop has been harvested is currently being looked at and considered. Preliminary tests have indicated that both fall seeding and using wheat as a companion crop have been quite successful in commercial production.

The increased interest in grass seed production, not only in Alberta but throughout western Canada, has resulted in a new testing program being initiated. The Western Grass Seed Testing program, headquartered at CDCS, will be responsible for seed collection and distribution, data analysis and report collation. Species and variety performance trials sponsored by various seed companies will give producers and contracting seed companies an indication of which varieties are economical for commercial production. Test sites located in British Columbia, Alberta, Saskatchewan and Manitoba will include the major soil zones and irrigated sites.

Contact:	*Henry Najda*	*(403)362-1346*

Legislation to delegate administration of Brand Inspection Services

Bill 41, proposed legislation that would delegate the administration of brand inspections to the cattle industry was introduced in the Provincial Legislature on April 2, 1998.

"Industry pays the full shot for brand inspection and feels the private sector could provide the services more efficiently than government," says Ed Stelmach, Minister of Alberta Agriculture, Food and Rural Development. "Industry wants more say in the services it pays for and gets. Government would like industry to take more responsibility, both administratively and financially, for the services it finds most valuable. Although industry will be providing brand inspection services, producers have asked that responsibility for the Act and regulations remain with the Government. Bill 41 fulfils that request."

Cont'd on page 3

The Government's Brand Inspection Service is responsible for all aspects of registry, licensing, enforcement and identification of cattle being sold. Currently, brand inspectors work for the government and revenue from brand inspections comes to government. There are 35 brand inspectors and 45 part-time staff around the province.

It is being proposed that all the services be transferred together to a new industry partnership group called Livestock Identification Services (LIS), and the income and expenses associated with running the service be transferred as well.

The service will be accountable, both to the Government and to the industry it serves. A Secretariat will be appointed from Alberta Agriculture to be the Minister's liasion for the service, handling questions or complaints and monitoring the administration of the program and the legislation to make sure it's being run appropriately.

Industry actively supports the brand inspection change. LIS is made up of these major cattle industry associations:

- Alberta Auction Markets Association
- Alberta Livestock Dealers and Order Buyers Association
- Alberta Cattle Feeders Association
- Alberta Cattle Commission
- Western Stock Growers Association.

Producers with questions regarding the proposed new LIS brand inspection service should contact their representatives on these associations for more information.

Contact: Ron Glen (403)427-2137
Cliff Wulff (403)422-6256

Second annual 4-H project fair

4-H members and leaders will want to be in Olds on July 29 to 31, 1998 for Project Fair.

"Project Fair is a three-day event that focuses on homemaking and non-livestock projects," say Lori McRae, 4-H resource development coordinator with Alberta Agriculture, Food and Rural Development. "Members from across the province can participate in hands-on mini-sessions, a project bowl, bench show, fashion show and demonstration competition."

Gifts from the kitchen, entrepreneur, computers, woodworking, rope making and sewing trademarks are a few of the mini-sessions being offered.

"Major sponsors of Project Fair include Lammle's Western Wear and United Farmers of Alberta," adds McRae. "The program fee is $40 for members and $20 for leaders and parents. Applications should be received at the provincial 4-H office by June 1, 1998."

Members are responsible for their own meals, accommodation and travel costs. Camping and residence packages are available from Olds College.

Program information and application forms are available in the 1998 Provincial 4-H Spring and Summer Program booklets or from a regional 4-H specialist

Contact: Lori McRae
(403)422-4H4H (4444)

Student applications for 1998 SFEP and GCP

Summer Farm Employment Program (SFEP) applications will be available soon. Students may also be able to earn high school credits through the Green Certificate Farm Training Program (GCP).

"SFEP provides Alberta's youth the opportunity to gain farm work experience as part of Alberta's Summer Temporary Employment Program (STEP)," says Christine Paproski, program delivery specialist with Alberta Agriculture, Food and Rural Development. "Since the program began in 1972, it has helped more than 36,000 young people learn more about farming."

Through the program, full-time farmers receive assistance to hire young Albertans from July 1 to August 31. The Alberta government pays up to half of the employee's monthly wage to a maximum of $330 per month

"Prospective employees must be between 15 and 24 years of age and they cannot be a relative of the employer," says Paproski. "Employment must be a minimum of 30 hours per week."

Up to 500 young people will be accepted into the 1998 program. Application forms are processed on a first-come, first-served basis and employers and employees must apply together.

Application forms and program guidelines for SFEP are available on May 4 from Alberta Agriculture, Food and Rural Development field service offices. Application forms will be accepted until all program funds are committed or May 29, whichever comes first.

"Interested employers and employees should also consider applying for the GCP," adds Robert Hornbrook, supervisor, GCP. "The GCP allows students to earn high school credits while learning farm skills in a practical, hands-on training situation Employers and employees may be on the SFEP and the GCP at the same time."

Contact: Christine Paproski, SFEP (403)427-3124
Robert Hornbrook, GCP (403)427-4218

Minimizing calving difficulty

A new multi-media, interactive CD, ***Minimizing Calving Difficulty*** is now available. The CD was developed by Alberta Agriculture, Food and Rural Development to assist cow/calf producers, beef specialists and consultants, veterinarians and educators minimize calving difficulty.

"Calving difficulty cost Canada's beef industry $105 million annually," says Dr. John Basarab, beef management specialist with Alberta Agriculture, Food and Rural Development. "The CD presents information on the effect of various genetic and non-genetic factors on the calving difficulty."

Information on genetic factors includes:

- breed of sire and dam
- birth weight and calculating probable calf weight
- sire selection for growth, pelvic area and carcass traits
- heifer selection for growth, biological efficiency and pelvic area
- calf sex and shape

Information on non-genetic factors includes:

- nutrition
- body condition of dam
- heifer's weight at calving
- age of dam
- climatic conditions
- calving management

"The CD also highlights methods of minimizing calving difficulty and shows examples of malpresentations, the growth of a fetus during gestation and video clips on a normal delivery," says Basarab.

The CD works on Windows 3.1, Windows 95 and Macintosh applications and requires a computer with a CD-ROM drive, a sound card and a minimum speed of 60 MHZ. It features colorful slides and video clips, an interactive worksheet and the distinctive voice of Jack Howell, commentator for the agriculture radio show *Call of the Land*.

"The CD take about one hour to examine and the viewer can interrupt the presentation at any time and move on to different sections," adds Basarab. "AnimaGraphics Inc. provided the expertise for the design and production of this multi-media presentation."

The CD, authored by Basarab with the assistance of beef cattle veterinarian Dr. Joyce van Donkersgoed, costs $30 (plus GST) and can be purchased by calling (403)427-2283 or by mailing a cheque made out to the Alberta Provincial Treasurer to Laura Plant, Agronomy Centre, 6903 - 116 Street, Edmonton, AB T6H 5Z2. Add $2 (plus GST) for shipping and handling for addresses outside of Alberta and $5 (plus GST) for non-Canadian addresses.

Contact: Dr. John Basarab (403)427-4544

MAP – 20 years of excellence

The MAP '98 (Managing Agriculture for Profit) Conference, held January 27 to 29, 1998 in Red Deer, marked 20 years of excellence for the conference. This year's conference focused on understanding the changing marketplace and explored opportunities in adding value to traditional agricultural enterprises.

"Keynote speakers, Dennis McKnight, Jerry Bouma, Mike Leslie and Gordon Colledge all provided stimulating thought," says Doug Barlund, business development advisor with Alberta Agriculture, Food and Rural Development. "The presentations were designed to help Alberta producers consider and capitalize on changes in the marketplace, demographics, consumer demands, food safety, economics, diet preferences, market and distribution channels and people development."

MAP began as Managing Agricultural Technology for Profit (MATFP) in 1978, held at the Banff Centre for Education. The conference was spearheaded by the Farm Business Management branch. Dr. Hiram Drache, one of the conference speakers, addressed modern business techniques and also closed the conference with a session on *Where will your farm be in five years?*

"MATFP was such a hit that two conferences were presented in 1979, one in Banff and one in Peace River," says Barlund. "In 1993, the conference moved to Red Deer, a central location that provides greater flexibility for people to attend."

Many people contributed time and creative energy to make MAP '98 a success. The MAP planning team was a collaborative effort by several Alberta Agriculture staff.

MAP is sponsored and supported by many agri-industry players, including: Alberta Wheat Pool, Red Deer TV, UFA, Ag & Food Council, The Cooperators Insurance, Farm Business Management Initiative, Alberta Treasury Branches, Royal Bank, Bank of Montreal, Olds College, Western Producer, Agrium, Farm Credit Corporation, Golden Stem Co-op and Data Transmission Network.

After providing Alberta farmers and producers with a forum for accessing top quality information and ideas for 20 years, the MAP planning team is reflecting on the design and concept of MAP and exploring options for 1999 and beyond. The team is seeking advice and ideas to shape the future of this event. To be involved, contact Wilson Loree, member of the MAP planning team, at (403)556-4213.

Contact: Doug Barlund (403)864-3574
Wilson Loree (403)556-4213

Province's best 4-H speaker

Amy Fox's speech on this year's topic ***Today's Modern Cowboy, A Steward of the Environment..."*** earned her the title as Alberta's best 4-H public speaker in 1998.

"Fox, an Armena 4-H Beef Club member from Hay Lakes, was one of 14 top 4-H'ers who qualified for the recent competition in Calgary. All 14 had to speak at a minimum of three levels of competition to reach the provincial finals," says Kathy Hougham, 4-H project officer with Alberta Agriculture, Food and Rural Development. "Each finalist had less than one week to research and prepare a four to six minute speech on the selected topic. Fox's *The Myths and Facts of the Cattle Industry*, plus her impromptu speech won her first place."

In second place was Kate Sanford from Stony Plain and Brienne McLane from Hussar received third place honours. Sanford is a member of the Lakemere 4-H Beef Club and McLane is from the Hussar Nifty Knots 4-H Club.

Judging the prepared speeches for the competition were Jim Fisher from Q91 Radio, Jerry Hall of the 4-H Foundation of Alberta and Gaylene Groeneveld with Simmental Country magazine. The impromptu judges were Lynn McDonald-Palmer with Alberta Pool, Cheryl Mueller from the 4-H Alumni and Barrie Harrison from executive communications branch Alberta Agriculture.

"I was very impressed with the research and depth of treatment of the prepared speech topic by all the finalists, says Jim Fisher of Q91 Radio. "Each speaker was outstanding and it was very difficult to choose the top speaker

The 1998 Provincial 4-H Public Speaking Competition was sponsored by Calgary Exhibition & Stampede and Alberta Agriculture.

Contact: *Kathy Hougham*
(403)422-4H4H (4444)

Agri-News Briefs

Hemp symposium video pack

Interest in learning what's involved in growing hemp has increased enormously since the federal government agreed to allow hemp to be grown under license. A recent Alberta Hemp Symposium attracted a sell-out crowd to hear from experts in the field. In response to the interest in this topic, video copies of many of the symposium's sessions are now available.

Tape 1 – Where Do We Stand; and, Producer Experiences Growing Hemp

Tape 2 – Potential For Agricultural Fibers; and, Hemp in Paper-Making

Tape 3 – Potential For Hemp; Manufacturing and Retailing Hemp Products; and, Cleaning Hemp Seed and Agricultural Value-Added Engineering Centre (AVEC) Opportunities

Tape 4 – How Can Hemp Be Marketed; and Developing Agri-Fibre Industries in Alberta

Each tape costs $20 (plus $3 shipping and handling and GST). The complete set of four tapes costs $70 (plus $3 shipping and handling and GST). To order, contact the Multi-Media Branch, Alberta Agriculture, Food and Rural Development, 100A, 7000 - 113 Street, Edmonton, AB T6H 5T6, phone (403)422-3951, or e-mail **ken.blackley@agric.gov.ab.ca** Cheques or money orders (payable to the Provincial Treasurer) or credit cards are accepted.

Oat story workshop

A single-day workshop, the Oat Story, sponsored by Canadian Institute of Food Science and Technology (CIFST), is being held at the Edmonton Golf and Country Club on April 27, 1998. The workshop will provide participants an opportunity to explore the most current approaches to research. This is a chance to examine the possibilities of specific cereal grain application(s) in all food areas. The workshop costs are $150 for CIFST members, $200 for non-members and $75 for students. To register or for more information, phone (403)492-5362.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 6791

CANADIANA

Agri-News

Apr 20 1998

April 20, 1998

Intensive livestock operations – open house schedule

Alberta Agriculture, Food and Rural Development will be holding 16 open houses around the province to get public input on regulatory options for livestock operations.

On March 30, 1998, Ed Stelmach, Minister of Alberta Agriculture, Food and Rural Development, released a ***Discussion Paper on Regulatory Options for Livestock Operations***. The open houses are intended to increase awareness of the discussion paper and encourage individuals and groups to fill out the accompanying questionnaire. Teams of resource people from Alberta Agriculture and various government departments including Environmental Protection, Health and Municipal Affairs, will be available to answer questions about the options presented and the new draft ***Code of Practice for Responsible Livestock Development and Manure Management***. Local municipal government councillors and staff are encouraged to attend the open houses.

"I've said from the beginning that we are open to all suggestions and ideas," says Stelmach. "All those involved are looking forward to getting a wide variety of views on various options, including options that may not have been identified in the document."

The public is encouraged to drop in, obtain more information and fill out a questionnaire. The open houses will run from 2 p.m. until 8 p.m., to encourage as many people as possible to participate. A list of meeting locations, times and dates is included and will be widely publicized in local newspapers.

The discussion paper was created in response to concerns expressed by municipal governments, livestock developers and private citizens regarding the current process for approval of new livestock facilities, as well as the framework for monitoring and enforcing the environmental sustainability of existing livestock operations.

Alberta Agriculture staff would like to receive all responses by June 1, 1998. Results from the questionnaires and open houses will be compiled into a summary document that will be brought forward to the Standing Policy Committee on

Cont'd on page 2

This Week

Intensive livestock operations public meetings schedule 1

Managing fertility in a direct seeding system 2

Farm Implement Act review 3

Alberta 4-H Club top supporter of national program 3

PNWER – a team to be proud of 4

Seeding pastures for grazing 4

4-H explores the freedoms of Canada 5

Water system spring maintenance 6

Briefs 7

Agri-News Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861
Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca
Alberta
AGRICULTURE, FOOD AND

Agriculture and Rural Development. Following that, further defined proposals regarding livestock operations and possible regulations will be circulated for consultation later this fall.

Each copy of the discussion paper includes a mail-in questionnaire to solicit as much public input as possible. Anyone wishing a copy of the discussion paper may call the Policy Secretariat office of Alberta Agriculture at (403)422-2070. The discussion paper is also available on the Internet on Alberta Agriculture's webpage at:

http://www.agric.gov.ab.ca/economic/policy/ilo.html

Copies are also available through Alberta Agriculture district offices.

Contact: Ron Glen Mike Pearson
(403) 427-2137 (403) 422-2070

Regulatory Options for Livestock Operations Open House Schedule

Grande Prairie – Tuesday, April 28, 1998
Location: Trumpeter Inn
Time: 2:00 - 8:00 p.m.

Fairview – Wednesday, April 29, 1998
Location: Dunvegan Motor Inn
Time: 2:00 - 8:00 p.m.

Lac La Biche – Wednesday, April 29, 1998
Location: McArthur Place
Time: 2:00 - 8:00 p.m.

Vermilion – Thursday, April 30, 1998
Location: Elks Hall
Time: 2:00 - 8:00 p.m.

Lacombe – Tuesday, May 5, 1998
Location: Lacombe Legion Hall
Time: 2:00 - 8:00 p.m.

Warburg – Tuesday, May 5, 1998
Location: Warburg Community Hall
Time: 2:00 - 8:00 p.m.

Barrhead – Wednesday, May 6, 1998
Location: Neighborhood Inn
Time: 2:00 - 8:00 p.m.

Coronation – Wednesday, May 6, 1998
Location: Lions Recreation Centre
Time: 2:00 - 8:00 p.m.

Morinville – Thursday, May 7, 1998
Location: Municipal District of Sturgeon #90 Office
Time: 2:00 - 8:00 p.m.

Ryley – Thursday, May 7, 1998
Location: County of Beaver #9 Office
Time: 2:00 - 8:00 p.m.

Ponoka – Tuesday, May 12, 1998
Location: Crossroads Restaurant
Time: 2:00 - 8:00 p.m.

Taber – Tuesday, May 12, 1998
Location: Municipal District of Taber #14 Office
Time: 2:00 - 8:00 p.m.

Drumheller – Wednesday, May 13, 1998
Location: Drumheller Inn
Time: 2:00 - 8:00 p.m.

Medicine Hat – Wednesday, May 13, 1998
Location: Medicine Hat Exhibition & Stampede –
Cypress Centre
Time: 2:00 - 8:00 p.m.

Claresholm – Thursday, May 14, 1998
Location: Claresholm Community Hall
Time: 2:00 - 8:00 p.m.

Didsbury – Thursday, May 14, 1998
Location: Memorial Complex – Curling Rink
Time: 2:00 - 8:00 p.m.

Managing fertility in a direct seeding system

Producers reducing tillage operations and moving to direct seeding often ask about changes in nutrient requirements and how they can best provide crops with all necessary fertilizer when using a direct seeding system.

"Nitrogen requirements may change as tillage is reduced or eliminated," says Rick Taillieu, reduced tillage agronomist with the Alberta Reduced Tillage Initiative (ARTI), in Olds. "As crop residues are left on the soil surface, the rate of decomposition begins to slow. The nitrogen in the crop residue remains in the organic form, making it unavailable to plants for a longer period of time. Additional nitrogen may be required during the transition to direct seeding until a new balance is attained."

The cooler soils in the spring associated with direct seeding make some nutrients, including phosphorous and potassium, less available to the growing crop. Additionally, these nutrients aren't readily mobile in the soil so product placement as well as rates is critical. Phosphorous and potassium, nutrients which help promote early spring growth and healthy crop competition, should be placed with the seed or very near the seed row.

"A number of different fertilizer placement options are available to producers at seeding time," adds Taillieu. "In a single shoot system, fertilizer and seed are delivered through the same tube. When used with a high disturbance opener like a sweep, this allows for high fertilizer rates by using a greater percentage of the seed bed. Double shooting, which delivers seed and fertilizer separately, can be used with a number of different ground openers including low disturbance knives. It allows fertilizer to be placed near the seed but safely in its own furrow."

Cont'd on page 3

To see some of the different systems and openers in action, be sure to attend the provincial direct seeding day at the ARTI Red Deer direct seeding day on July 7, 1998.

"Fertility management is a key component in successful direct seeding systems," says Taillieu. "It is important to understand what is required by each crop in a rotation and what is available to that crop. Regular soil testing will provide this and allow producers to monitor changes in the fertility of the soil from year to year."

Contact: Rick Taillieu (403)556-8235
Peter Gamache (403)427-3361

Farm Implement Act review

A review of the Farm Implement Act (FIA) was announced by Ed Stelmach, Minister of Alberta Agriculture, Food and Rural Development. For several years discussions have been under way between the prairie provinces to develop harmonized legislation. The new legislation, standardizing warranty requirements and other areas that will enhance inter-provincial trade, is tentatively scheduled for tabling in the 1999 spring session.

"The Act provides warranty and quality protection for purchasers of new equipment and offers standards for repair services," says Dean Lien, FIA Administrator. "In this review, we will be seeking input from manufacturers, distributors, dealers and farmers."

The seven-member Farm Implement Board will provide valuable feedback for the development of the new legislation The Board provides advice to the Minister on matters arising out of the FIA and works closely with the Farmers Advocate Office.

"There are currently two vacancies for farm members on the Board," adds Lien. "The Board seeks individuals with a strong farming background, an understanding of contract and servicing of farm equipment and familiarity with the regulatory process."

Appointments to the Board are for a three-year term Members are paid remuneration and expenses for meetings attended. The Farmers Advocate Office can provide further information on the Farm Implement Act and Board.

"This promises to be a very active and busy time," says Lien. "I look forward to the FIA review and the more Alberta farmers who get involved with this initiative the better the Act will serve Albertans in the future."

Contact: Carolyn Makowecki (403)427-2188
Dennis Budney (403)427-2188

Alberta 4-H Club top supporter of national program

Even in tough times, local 4-H clubs remain committed to supporting and strengthening their program at the national level. Once again in 1997-98, 4-H clubs across the country enthusiastically held fund raisers contributing several hundred dollars in support of the Canadian 4-H Council and this year's contributions have put accumulated club donations at $2,300 collected over the past five years

"The National 4-H Club Fund program was designed to provide clubs with the opportunity to support National 4-H programs and services," says Carol Sullivan, provincial 4-H communications and marketing specialist with Alberta Agriculture, Food and Rural Development. "More than 40 clubs have participated over the past four years with the western provinces being the biggest supporters, donating more than 88 per cent of total contributions. Manitoba and Saskatchewan lead the way with the greatest number of donors and Alberta holds the distinction of making the largest contribution and consequently, the highest accumulated total donations. Contributions have ranged from $10 to $500 and each one, regardless of its size, is equally appreciated. Funds have been raised through bake sales, raffles, car washes and other events. Each participating club has received a letter of thanks and an appreciation certificate for their efforts and has been recognized in Council publications."

Each year the top contributing club receives a special award. The Canadian 4-H Council is pleased to recognize the Freedom Naples 4-H Multi Club of Alberta as this year's top donor. Other 1996 participants include: Sturgis 4-H Multiple Club, (SK), Arm River 4-H Multiple (SK), Humboldt 4-H Multiple (SK), Buckhorn 4-H Club (BC) and the Durham West 4-H Association, (ON).

The Canadian 4-H Council is pleased that members recognize the importance and value of the program. Many clubs have written about the merits of 4-H and expressed their appreciation of the programs, services and national 4-H opportunities offered by the Canadian 4-H Council. The Council thanks everyone for their kind words and generous support

"All 4-H clubs are encouraged to get involved," adds Sullivan. "Financially supporting the national 4-H organization could mean more delegates to national programs, creation of new programs and services, expansion of the supply service and wider circulation of publications. Each participating club decides when and how they want to raise funds and the amount of profit they wish to donate. No contribution is too small."

Cont'd on page 4

Anyone interested in providing a donation or learning more about this initiative should contact the national office, Angie Friend, Communications Coordinator, 1690 Woodward Dr., Suite 208, Ottawa ON K2C 3R8.

Contact: *Carol Sullivan*
(403)422-4H4H (4444)

PNWER – a team to be proud of

Farmers agree that when you want a job done in the most efficient manner, you're better off working as a team rather than as an individual. There's nothing like having all the combines in your community working as a team to complete the harvest before the dew gets too heavy, or all the neighbors pitching in to battle a stubborn grass fire.

"The concept of teamwork also applies to being a 'player' in the global economy," says Hon. Ed Stelmach, Minister of Alberta Agriculture, Food and Rural Development. "I'd like to tell you about an important team that Alberta plays on: The Pacific NorthWest Economic Region (PNWER).

"PNWER consists of Alberta, British Columbia and the American states of Alaska, Idaho, Montana, Oregon and Washington. Recently, the Yukon Territory also came on board. The population of this region is over 18 million and if PNWER was a single country, it would rank 10th among the world's industrial economies. The Pacific NorthWest Economic Region was established almost a decade ago. You might not have heard much about it, but I have a feeling that's about to change before long. That's because, for the first time, a legislator outside the state of Washington holds the position of president. That person is David Coutts, MLA for Livingstone-Macleod. Coutts joined me on a recent trip to Washington, D.C. to talk with Senators and Congressmen about Bill C-4 and U.S. trade.

Coutts and I also talked with these influential American politicians about PNWER."

PNWER is a partnership between public and private sectors. Each province and state pays dues, which are matched by the private sector. PNWER's goal is to make the entire region globally competitive. In some Asian and European communities, the public sector helps open the door for business so the private sector can make the sale. That's what PNWER is designed to do. By being a partner in PNWER, Alberta can bring regional issues to the forefront for discussion by people in the region who are affected.

"Alberta farmers have much more in common with farmers in the Pacific northwest than with farmers in central and eastern Canada," says Stelmach. "Environmental issues, water quality issues, infrastructure and lack of railway competition, to name a few, are issues we all share. The PNWER Committee is meeting in June in Portland. It'll focus on agricultural environmental issues and will likely follow up the grain summit from last June. Perhaps this one will be called Grain Summit II.

"PNWER is kind of like a pot-luck supper. The more people involved and the more they bring to the table, the better it is. PNWER has the full support of Alberta Agriculture, Food and Rural Development and I'm confident Mr. Coutts will do a fine job as president."

If you would like more information about the Pacific NorthWest Economic Region, contact Stelmach's constituency office at (403)632-6840 or the Edmonton office at (403)427-2137. The phone number for David Coutts' office in Edmonton is (403) 427-1828 and his constituency office number is (403) 553-2400. Government numbers are toll-free in Alberta by dialing 310-0000 and then the seven-digit number.

Contact: *Ron Glen*
(403)427-2137

Seeding pastures for grazing

Pasture establishment can provide many years of prosperity and satisfaction or a few years of frustration followed by expensive tillage.

"Pasture species selection, variety choice, seeding method and grazing management are all important to successful pasture establishment," says Lorne Erickson, forage specialist with Alberta Agriculture, Food and Rural Development, Rimbey. "Choosing the correct grass and legume species for the location and grazing use is step one. Although regrowth potential after grazing is an important consideration, it's not always best to go after the newest, most productive grass on the list."

Carefully consider the limitations of the location, the timing of grazings and the stocking rate. Pasture species suited to poorly drained areas must tolerate some flooding and be able to form a dense sod. Reed Canary Grass, Meadow Foxtail and Creeping Foxtail are good wetland grasses, but grazing must be managed to keep them from becoming too mature and unpalatable. Alsike Clover is the best adapted of the legumes to wet conditions.

Cont'd on page 5

"Of the grasses, Orchardgrass is one of the most productive in intensive grazing systems," says Erickson. "It requires good management of moisture, fertility and grazing to remain productive. Meadow Brome also regrows well and is more winter hardy and drought tolerant than Orchardgrass. Smooth Brome and Timothy are widely used in pastures but are better suited to hay production because of their limited regrowth potential."

In central Alberta, Kentucky Bluegrass and White Clover are good choices if the pasture will be under heavy continuous grazing. Bluegrass has a tolerance to repeated short clipping and creates a dense sod. Creeping Red Fescue also forms a dense sod and maintains its quality well when stockpiled for early spring grazing.

The most drought tolerant grasses are Russian Wildrye, Altai Wildrye, Crested Wheatgrass, Intermediate Wheatgrass and Slender Wheatgrass. Seeding a legume with the grass increases pasture quality and enhances soil nitrogen.

"Keeping the legume component below 50 per cent of the mix limits bloat problems," adds Erickson. "High percentage legume pastures give the greatest animal performance but require better grazing and fertility management. Creeping rooted alfalfas are best adapted to grazing pressures but are less productive than Standard or Flemish types. Bloat resistant alfalfa are under development and should be available soon. Birdsfoot Trefoil, Cicer Milkvetch and Sainfoin are low bloat legumes but are more difficult to manage than alfalfas or clovers. Recent research shows that seeding Sainfoin and alfalfa together reduces the risk of bloat on pastures."

For information on seeding pastures, contact an Alberta Agriculture forage specialist.

Contact: Lorne Erickson
(403)843-2201

4-H explores the freedoms of Canadians

Canadian citizenship carries with it many roles and responsibilities but also offers numerous opportunities, rights and freedoms unparalleled in many countries. Fifty-three 4-H members from across Canada examined their rights, roles and responsibilities to their nation as they gathered in Ottawa, March 27 to April 2 to participate in the 27th Annual National 4-H Citizenship Seminar. Participating in the conference from Alberta were Kyley Johnason – Lakedell 4-H Beef and Lakedell 4-H Lighthorse clubs from Westerose, Leif Brost – Irvine 4-H Beef Club from Irvine, Susann McGowan – Killam 4-H Light Horse Club from Killam, Chad Meunier – Meadowview 4-H Multi Club from Barrhead, Lindsey Sakariassen – Heads & Heels Stockdog Club from Carstairs and Lea Wacowich – Sturgeon Clever Clovers 4-H from Redwater.

"The theme of this year's conference, *Canada. . The Freedom To Be*, focussed on the opportunities inherent in living in our country, and the importance of ownership and shared responsibility," says Carol Sullivan, provincial 4-H communications and marketing specialist with Alberta Agriculture, Food and Rural Development. "Delegates learned that every Canadian has an equally important role to play in Canada's social fabric and future. Conference participants explored the issue of Canadian diversity and multiculturalism with a speaker addressing Cross Culturalism and Race Relations. They also viewed a live performance of a Native Dance Troupe from Cornwall Island and discussed their culture with them. Participants attended a Citizenship Court Ceremony where they re-affirmed their Canadian citizenship side by side with individuals being sworn in as new Canadians."

Other conference sessions, including an address by Member of Parliament, Paul Steckle, were devoted to learning about how our government works. Delegates toured the Parliament Buildings and Supreme Court, viewed Question Period and joined MP's from their home ridings for a Parliamentary Luncheon. Delegates also sat in the Senate while being addressed by the Speaker of the Senate, Gildas Molgat, and were then hosted in his chambers for an informal reception and discussion. Delegates also experienced the political process first-hand by participating in a simulated House of Commons debate. Political parties formed to argue the controversial issues surrounding Euthanasia.

"The success of any 4-H event is largely due to the generous financial assistance provided by its sponsors," adds Sullivan. "Major supporters of the 1998 conference include: Department of Canadian Heritage, Agriculture and Agri-Food Canada, Ambassador Travel Plus Golf & Cruise Centre, the Masonic Foundation of Ontario, Canadian Pacific, Canadian Imperial Bank of Commerce, Canadian Seed Growers' Association, SeCan Association, Manitoba 4-H Council, Canadian Cattlemen's Association and University of Guelph."

Canadian 4-H Council officials join the 1997 delegates in thanking this year's conference sponsors for their valuable support and their commitment to the 4-H movement and Canada's rural youth

Contact: Carol Sullivan
(403)422-4H4H (4444)

Water system spring maintenance

Springtime means it's time to start thinking about well and water system maintenance. There are over 200,000 water wells in Alberta and many rural families rely on these systems as their only water source.

"There are a few steps that should be followed to check on-farm wells and water systems before other spring work gets into full swing," says Ken Williamson, agriculture engineering technologist with Alberta Agriculture, Food and Rural Development, Red Deer.

Shock chlorinating a well – iron and sulfate bacteria are common well problems. They cause iron staining and a rotten egg odour in the water. Controlling them usually involves twice-a-year shock chlorination of the well. Spring is a good time to do this.

Recharge the air pressure tank – a properly operating pressure tank protects the pump from turning on and off every few seconds. The tank contains compressed air and water. In many tanks the air will get absorbed into the water, causing a water-logging condition. This causes the pump to kick on and off every time a small amount of water is used. The constant on and off cycles will damage the pump motor. Recharging the tank in the spring will add to the life of the pump if the pressure tank is the type that needs regular recharging.

Check the well pit – well pits can be major routes of well contamination, especially during spring runoff. Many pits get partially filled with surface water or shallow ground water in the spring. If this happens, be sure to replace the pit with a pitless adaptor or, at least, put a sump pump in the pit to keep it dry and make sure there is a sanitary seal on the top of the well casing. (Locating a well in a well pit was banned in 1993 under the Alberta Environmental Protection and Enhancement Act but many older wells are still located in pits and have a high potential for contamination.)

Watch for deterioration of quality water during spring run off or heavy rains – if well water becomes murky in the spring it could be due to a poor well casing seal or another old well in the yard. Either one can allow runoff to get into an aquifer and contaminate a well. Old unused wells should be properly plugged to prevent contamination of ground water.

Three videos on maintaining wells are available at Alberta Agriculture offices; *Planning and Construction*, *Managing and Maintaining*, and *Shock Chlorination*. The videos can also be purchased, separately or as a series, from Alberta Agriculture, Publications Office, 7000 - 113 Street, Edmonton, Alberta T6H 5T6, or call toll free 1-800-292-5697.

Planning and Construction	$10.00 (plus GST)
Managing and Maintaining	$10.00 (plus GST)
Shock Chlorination	$20.00 (plus GST)

Please add $2.00, plus GST, for shipping and handling.

Contact: *Ken Williamson*
(403)340-5324

Agri-News Briefs

MAP '98 on video

Videos of key sessions from the Managing Agriculture for Profit '98 (MAP '98) are now available. This annual conference is an in-depth look at the opportunities and prospects for the agriculture and food industry in Alberta. The videos, a comprehensive set of information on the challenges facing agriculture and food industries, are a reference tool producers and processors will want have on hand. There are 15 videos in the complete set.

Future of the Industry –

- Are You Ready for a Changing World?
- Changing Market Trends in Food and Agriculture
- Responding to Change
- The Customer is King
- Plan on Planning

Market Sessions –

- A Taste of Japan
- Europe – Are There Really Opportunities?
- Doing Business in Mexico and Latin America
- The U.S. Market – So Near and Yet So Far
- China – Hot and Hustling

Business Sessions –

- New Generation Co-ops
- Family Business Integration
- Marketing Co-operatively
- Financing a Business
- Is the Investment Worth the Risk?

The videos cost: one to four videos @ $20 each (plus GST); five to fourteen videos @ $15 each (plus GST); or the complete conference package is $199 (plus GST). Please include a shipping-and-handling fee of $3 (plus GST) per order for Canadian orders, or $6 (plus GST) per order for out-of-Canada buyers. To order, contact Ken Blackley, Multi-Media Branch, Alberta Agriculture, Food and Rural Development, 100A, 7000 - 113 Street, Edmonton, AB T6H 5T6. Make cheques payable to the Provincial Treasurer. Visa and MasterCard are accepted by calling (403)422-3951 or e-mail **ken.blackley@agric.gov.ab.ca**

Clydesdales making a come back

The Wild Rose Draft Horse Association is offering the largest number of Clydesdales ever consigned to an All-Breeds auction in western North America at the May 2, 1998 sale in Olds. Twenty-six head of Clydesdale and Clydesdale-Shire cross mares, stallions and geldings are consigned. In the past years, the Clydesdale breed hasn't been well represented at the Olds sale, but members of the active Alberta Clydesdale Association are throwing their full support behind the 1998 sale in hopes that Olds will become the showcase Clydesdale sale for all of western North America. There are also over 50 head of quality Belgian and Percheron draft horses consigned to the event. David Carson, well known Listowel, Ontario draft horse auctioneer, will be presiding over the auction. For more information, contact Bob Ruthven of the Alberta Clydesdale Association at (403)464-0679, Sherwood Park

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 6916

Agri-News

APR 23 1998

April 27, 1998

Alberta is the SAFEST place to grow

Let's face facts, farming is a dangerous occupation and try as we might to be as cautious as we can, injuries and sometimes fatalities occur. Another fact, however, is that Alberta Agriculture, Food and Rural Development can and is doing something about it.

The department, along with the agriculture industry in Alberta, is on the leading edge of farm safety initiatives. Most recently, the department released an interactive CD-ROM called ***Lost on the Farm***, aimed at elementary school children. The CD-ROM was created to raise awareness about farm safety among rural students.

Over the last few years, Alberta Agriculture's farm safety program has taken a positive approach to encouraging safety practices on the farm. "Telling farmers what they can and cannot do simply doesn't work anymore," says Solomon Kyeremanteng, manager of Alberta Agriculture's farm safety program. "Instead, we've decided to give our farmers all the safety information we can. From there, they'll make the best informed decision for them and for their families. I think it's working!"

Recently-released statistics from the Canadian Agricultural Injury Surveillance Program show that between 1991 and 1995, Alberta had the lowest number of work-related farm fatalities based on farm population in the entire country. "All farmers take their occupation seriously," says Kyeremanteng. "We should all be proud of the fact that Alberta farms are the safest places to grow in Canada."

Between 1991 and 1995, Alberta recorded 66 work-related farm fatalities, or 7.5 fatalities per 100,000 farm population. This compares to 10 fatalities per 100,000 in Saskatchewan, 12.1 in Manitoba, 12.8 in British Columbia, 13.4 in Ontario, 14 in Quebec and 16.7 in the Atlantic provinces. Alberta sits well below the Canadian average of 11.6 fatalities per 100,000 farm population.

"This is a time of mixed emotions," says Kyeremanteng. "On one hand, we can celebrate that Alberta is doing wonders in terms of farm safety. However, we must still think of those who died and what we can do to prevent similar tragedies in the future."

For more information or to receive the new poster ***Work-Related Farm Fatalities in Canada*** contact Kyeremanteng at (403) 427-4227.

Contact: Solomon Kyeremanteng (403) 427-4227

This Week

Alberta is the SAFEST place to grow 1

Crop rotations and direct seeding 2

Pre-seed weed control in direct seeding 2

Snowy March weather 3

Time to smell the roses! 4

Briefs 5

Agri-News Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta AGRICULTURE, FOOD AND

Crop rotations and direct seeding

Developing a good, flexible rotation is important in direct seeding systems.

"Stu Brandt and others from the Scott Research Station have found that developing a good rotation can increase yields, increase the amount of nitrogen the soil supplies, enhance weed control, reduce diseases and improve economics," says Peter Gamache, Alberta Reduced Tillage Initiative (ARTI) program manager. "The use of cereals, oilseeds, pulses and legumes in a rotation can be very beneficial."

Dwayne Beck in ***Zero Tillage Advancing the Art*** (Manitoba-North Dakota Zero Tillage Association – 1997) points out that direct seeding rotations should be more intense than conventional till rotations. Since direct seeding enhances moisture supply, it is important to use crops that use more water or to add a crop in a fallow system. Failure to use the extra water in a no-till system increases weeds and diseases and lowers profits.

"Beck also says that part of developing a rotation involves increasing diversity as well as intensity," says Gamache. "Crop diversity can spread risk, allow herbicide rotations to manage weeds, reduce diseases, manage workloads and create good seed beds for subsequent crops. Diversity increases as the years separating the same crop type increase. It is enhanced by including grasses and broadleaf crops, spring and fall sown crops, and warm and cool season crops. Adding biennial and perennial crops further increases diversity."

Research at Melfort (moist black soil zone) and Scott (moist dark brown soil zone) has shown that the yield of cereals on the stubble of oilseeds or peas was higher than on cereal stubble (AgriFuture 1996). Yield of oilseeds was higher on cereal or pea stubble and pea yield was greater on cereal or oilseed stubble. The introduction of a legume such as peas to the rotation increased the amount of nitrogen that the soil supplied and consistently increased wheat protein at Scott.

Rotations can enhance weed control by allowing for products from all herbicide groups to be used. The risk of weed resistance is reduced, more cost effective herbicides can be selected and timing of weed control can be varied. Competitive perennial crops such as alfalfa can help reduce weed problems and costs. Fall seeded crops such as winter wheat and fall rye can be very competitive with winter annuals

"Crop rotation can reduce soil and residue borne disease," adds Gamache. "Infected residues have a chance to decompose and spores are less likely to find suitable hosts. Broadleaf crops require a longer interval between similar, susceptible crops than cereals, while oilseeds and pulses may be susceptible to the same diseases, such as sclerotinia. Increasing diversity in the rotation can increase the interval between the same crops and helps to control disease.

"Residue management is critical in a direct seeding system. Crop rotation is another tool to manage residue. More diverse rotations may allow producers to avoid growing back to back high residue crops. Less residue may ease planting concerns the following spring. It may also be beneficial in high moisture areas where snow catch may not be desirable in some years. Adequate residue to prevent wind and water erosion is always important."

Designing rotations to make the most of a direct seeding system is a challenge. For more help call one of the ARTI agronomists or Alberta Agriculture crop specialists. For more information, contact ARTI program manager, Peter Gamache at (403) 427-3361, or ARTI agronomists, Mark Olson in Leduc (403) 980-4898, Ron Heller in Vermilion (403) 853-8101, Rick Taillieu in Olds (403) 556-8235 and, after May 12, Grant Nelson in Stettler (403) 742-7546.

Contact: *Peter Gamache*
(403) 427-3361

Pre-seed weed control in direct seeding

The current trend in field crop production across the prairies is direct seeding. A common practice used by direct seeders is to "burn-off" any green plant growth (weeds & volunteer crop) with a herbicide before seeding. The idea is to conserve soil moisture and nutrients while reducing competition for the crop to be seeded.

"There are a couple of recent research reports that provide an interesting look at fine-tuning this pre-seeding weed control strategy," says Ron Heller, Alberta Reduced Tillage Initiative (ARTI) agronomist in Vermilion. "Garry Ropchan, research coordinator for Central Peace Conservation Society (CPCS) in Spirit River, reports that skipping the pre-seed burn off, even with 100 per cent disturbance of the seed bed at the time of seeding (40' Concord air drill with 12 inch sweeps on 10 inch spacing and 2 inch tillage overlap) resulted in lower crop yields than when the pre-seed application was done."

In this field trial, the yield difference for a pre-seed Roundup treatment at one litre per acre compared to no treatment, measured out to 30.1 bushels per acres and 23.0 bushels per acre respectively of Quest canola. The report indicates a pre-seeding weed control advantage of $36.50 per acre (increased net return).

"Another report by Ropchan I found particularly interesting suggests that yields in direct seeding may be affected by the delay between the burn off application and the seeding date," says Heller.

Cont'd on page 3

CPCS has a project to evaluate the effect of different days before seeding (DBS) intervals. In 1996, for a field of Brier barley direct seeded on June 11, the results were summarized as follows

1. DBS produced a significantly higher yield than 19 DBS and 4 DBS
2. 19 DBS produced a significantly higher bushel weight than 8 DBS and 4 DBS

In 1997, a field of Roblin wheat direct seeded on May 30 was evaluated for yield effect of three different burn-off days (two before seeding and one after). Measured yields were 32.0 bushels per acre (19 DBS) and 32.8 bushels per acre (7 DBS). The lowest yield was 25.9 (five days after seeding). The conclusions drawn are:

1. better performance prior to seeding;
2. good control as early as 2.5 weeks before seeding;
3. about one week before seeding seems to be ideal.

"This second report included a discussion on the interaction of dying plants, disease pathogens, and roots," adds Heller. "Apparently, with the application of a burn-off herbicide, the dying plants are unable to fend off disease pathogens (rhizoctonia, pythium, etc.) that soon move into the roots and quickly multiply. Potentially, a direct seeded crop could be susceptible to varying degrees of attack by increased populations of root pathogens, depending on the interval between spraying and seeding. How significant or true this may be for direct seeders requires further study."

To summarize the application in practical terms for direct seeding weed control:

- Don't count on high disturbance seeding to replace a pre-seed application of a burn-off herbicide. As a rule, early control of weeds and volunteers conserves the seed bed moisture and nutrients for your crop and will favor improved yields.
- Pay close attention to the timing of a pre-seed herbicide application relative to your seeding date. More than just the threat of active weed growth, flushes, or regrowth before the crop establishes seems to be involved...perhaps a weed "die-off" factor exists.

Contact: Ron Heller
(403) 853-8101

Snowy March weather

March weather was snowy with above normal precipitation and near normal temperatures.

"During the first part of March, most locations in Alberta reported snow with near normal temperatures," says Peter Dzikowski, agri-weather specialist with Alberta Agriculture, Food and Rural Development. "Cold Arctic air returned, dropping temperatures to below normal. Temperatures quickly returned to above normal in mid-March."

The provincial average precipitation of 28.3 mm was 7.9 mm above the 1961 to 1990 average of 20.4. These averages are based on data recorded at 62 Environment Canada climate stations across Alberta.

"A late winter snow storm in southern Alberta March 15 and 16, dropped 20 to 40 mm of precipitation," says Dzikowski. "Over the two days, Calgary reported 36.2 mm of precipitation, about two and a half times the average for March. An additional 10.6 mm of precipitation fell on March 22, the second day of spring bringing Calgary's monthly precipitation total to 59.4 mm or 412 per cent of normal. This was typical of most stations in southwest Alberta."

The western half of the province and all of the southern region reported above normal precipitation while the eastern half reported below normal precipitation. Amounts of 3.1 to 134.8 mm, or 16 to 505 per cent of normal were reported.

High River received the most precipitation, 134.8 mm, 505 per cent of normal. Coronation reported 3.1 mm of precipitation in March, only 16 per cent of it's long term average.

The provincial average temperature was 0.3 degrees above the 1961 to 1990 average of -4.1 degrees C."Above normal temperatures during the last week of March helped to melt some of the snow," adds Dzikowski.

Alberta locations reported a wide range of monthly average temperatures from 0 to 3 degrees below normal in the southern region, to 0 to 3.9 degrees above normal in all other regions. Temperature departures of about 3 to 3.9 degrees above normal were reported in the Peace region.

More details on Alberta's weather are available on the Alberta Agriculture Internet site

http://www.agric.gov.ab.ca/climate/index.html

Contact: Peter Dzikowski
(403) 427-3594

Time to smell the roses!

As you travel along highway one between Calgary and Medicine Hat, you may be impressed by the vastness of the prairie, especially the stretch between Medicine Hat and Brooks. It is hard to believe that amidst the stark prairie there is a jewel, a place where the green grass beckons, and the visual dance of the colorful annuals hypnotizes. You would drive right by and not even know it exists as it is set back from the highway. This oasis is the Crop Diversification Centre South (CDCS). Now to many people of Alberta this sounds like a new place, but this facility has been here since the early 1950's and has been in horticulture and special crops since the 1930's – it was just known as the Provincial Horticulture Station or *The Hort*. CDCS is just 5 km east of Brooks on the south side of Highway 1.

"CDCS offers the weary traveller a rest-bit from the summer heat," says Shelley Barkley, information officer with Alberta Agriculture, Food and Rural Development. "The large trees and green grass of the picnic area are a favorite spot. Many travellers stop with picnic lunch to enjoy some shade and pretty surroundings then wander through the landscaped grounds to admire the plants. The grounds are open during day light hours seven days a week."

At CDCS, visitors will find the Golden Prairie Arboretum, established in 1981. The collection contains 531 prairie hardy deciduous trees and shrubs. It's a place to see some odd and wonderful stuff, as well as some time honored favorites. Here visitors can admire 120 different lilacs in every shade of purple, pink and white imaginable, the poplars that were developed here and carry "Brooks" in their name and even shorts pine caragana. Every tree and shrub is labelled, so bring along a pencil and paper. Whether spring, summer or fall, the arboretum is a spectacular place to wander.

"The Forever Green Pinetum, a collection of coniferous trees and shrubs, was established in 1986 but many of the large specimens in this group were planted in the 1950's, says Barkley. "There are a total of 120 trees and shrubs in the pinetum from Scots pine to weeping larch. Plants here are labelled, also. On days when the southern Alberta winds are blowing, this is often the calm refuge on the grounds.

"A place that the younger set have christened "the maze" is actually the rose garden. Many of the early Canadian rose cultivars and crosses made by rose breeders like Skinner, Bugnet and Wallace can be found within the walls of the spruce hedge. There are 241 rose specimens that include the hardy, reliable shrub roses to the tender hybrid tea roses. New Canadian roses, the Explorer and Parkland series, can also be seen here. These roses on their own hardy roots are from Agriculture and Agri-Food Canada's breeding programs."

The Annual Flower Display, a show stopper, is located near the entrance to the grounds. Here visitors can stroll through the All American Selection (AAS) trials. The AAS is a respected organization that coordinates results from test sites all over North America to provide the widest possible distribution for cultivar recommendations for Canada and the USA. CDCS, one of two test sites in Alberta, grows new cultivars sent by AAS. The annual flower garden displays flowers grown from seed donated by various seed companies, past winners of AAS and the new cultivars under testing. Each row is labelled so gardeners and professional growers can choose cultivars for their own use.

Tours of the research plots are available to the public Monday through Friday 9:00 am to 3:00 pm, except holidays. Plot tours are about 45 minutes. While out in the plots visitors can see some of the exciting research being done in new varieties and the culture of horticultural and special crops. Tours are by appointment.

Stop and smell the flowers this summer at the Crop Diversification Centre South.

Contact: *Shelley Barkley*
(403) 362-1305

Agri-News Briefs

Egg quality contest

Plans have been set for the 1998 Egg Quality Contest. Egg producers can bring their egg entries to one of three locations according to this schedule:

May 12	Edmonton, Lilydale
May 13	Calgary, Sparks Farm Eggs and Lucern Eggs
May 14	Lethbridge, Coaldale Egg, Agriculture Canada western depot

Awards for the contest will be presented on June 17, 1998 at 3:30 p.m. at the Red Deer Lodge as part of the Poultry Workshop. The 3rd annual ***Poultry Producers Workshop*** includes producer's sessions on: Start clean, Stay clean: Why we need it; Food safety; Egg quality; and, Sharing the market. For further information, contact Alberta Egg Producers Board (403)250-1197, Calgary.

Beaverlodge beekeepers' field day

The 45th annual Beaverlodge Beekeepers' Field Day is on June 26 at the Beaverlodge Research Centre. The date is later than in previous years to help accommodate beekeepers who are busy in early June with nuc preparation and requeening management. The program includes commercial and beekeeping displays as well as research highlights. The afternoon includes guest speakers, researchers and provincial apiarists addressing bee-related topics and reports from the Alberta Beekeepers Association and the Canadian Honey Council. For further information, contact Don Nelson, research centre, Beaverlodge, (403) 354-5122 or e-mail: nelsond@em.agr.ca

Milk – an important daily choice

As one of the four food groups, milk and milk products are an important daily food choice. Calcium, in particular, is essential for development and maintenance of strong bones and heart, nerve and muscle function. Milk is also fortified with vitamin D, essential for calcium absorption. Canadian cheeses are a tasty way to obtain calcium. According to Canada's Food Guide to Healthy Eating, one serving of milk and milk products must contain at least 275 mg of calcium. The size of a 50 g piece of cheese is about 3" x 1" x 1"; shredded, 50 g is about 1/3 to 1/4 cup. Young children need at lease two to three servings; pre-teens and teens require three to four servings and adults need two to four servings daily. For further information, contact Alberta Milk Producers, (403) 453-5942. For toll free outside the Edmonton area, call 1-800-252-7530.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 7039

Agri-News

MAY 5 1998

May 4, 1998

Waterborne parasite study gets full funding

A three year project to determine possible sources of the waterborne parasites *Cryptosporidium parvum* and *Giardia lamblia* in the North Saskatchewan River basin, has been granted full funding from the Canada-Alberta Beef Industry Development Fund, Alberta Agriculture Research Institute (AARI) and received significant in-kind contributions from stakeholders.

"Cryptosporidium and Giardia are intestinal parasites that can infect humans and cause scours in young calves," says Dr. Merle Olson, professor of Microbiology and Infectious Diseases at the University of Calgary. "The parasites can be transmitted to other livestock or people through ingestion of fecally contaminated food or water."

"Cryptosporidium and Giardia can be a significant threat to public health," says Sandra Cooke, biologist with Alberta Agriculture, Food and Rural Development, and project manager of this multi-discipline, multi-stakeholder research project. "We have researchers from the Universities of Alberta and Calgary, Alberta Environmental Protection, Regulatory Services and Water Sciences Branch, Aqualta, EPCOR, Alberta Research Council-Vegreville, Alberta Health as well as Alberta Agriculture, Food and Rural Development as full partners in this research. Health Canada has also been approached to partner in this research program."

Both Cryptosporidium and Giardia can cause severe gastrointestinal illness (watery diarrhea, abdominal cramps, nausea, low-grade fever, and dehydration) in humans. Giardia is more commonly known as the parasite that causes 'Beaver Fever'. People with healthy immune systems who get infected with Cryptosporidium can recover in 7 to 10 days; however, in severe cases, people with weakened immune systems (people undergoing chemotherapy, AIDS patients, the elderly or infants) can die from this illness.

Potential sources of Cryptosporidium and Giardia in surface water include runoff from livestock manure, human sewage effluents and sewage lagoon discharges and wildlife feces that reach surface water.

Continued on page 2

This Week

Waterborne parasite study gets full funding 1

Alberta's 1997 agri-food exports 2

Seeding management for direct seeding 3

More news on an old pest – sclerotinia 4

Brooks to host youth exchange 4

Canadian Quality Assurance Program 5

Direct seeding into sod 6

Briefs

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND

"Aqualta has been monitoring for Cryptosporidium and Giardia in the raw and treated river water for the City of Edmonton for the past seven years" says Les Gammie, PhD., director of quality assurance, Aqualta. "Filtration during the water treatment process can remove 99.9 to 99.99 per cent of all the Cryptosporidium and Giardia; however, it is not a 100 per cent guarantee that these parasites will not get into the treated water supply. High levels of turbidity or suspended particles in the water can compromise the filtration process causing an increased risk of these parasites reaching the treated water supply. If there is any significant compromise in a water treatment system, health authorities immediately issue boil water advisories to safeguard the public."

In the spring of 1997, the Capital Health Authority issued two boil water advisories for people with compromised immune systems. As a result, stakeholders came together to discuss the issue of elevated levels of Cryptosporidium and Giardia in the North Saskatchewan River at Edmonton. A three-year research project was proposed to identify all possible sources of Cryptosporidium and Giardia in the North Saskatchewan River basin, upstream of Edmonton. The primary objective of the research is to develop strategies to protect surface water from parasite contamination. The goals of this comprehensive research project are to determine whether cattle, human sewage effluent and wildlife are significant sources of parasites to surface water.

Information gained from this research will benefit producers, health authorities and water and wastewater treatment facilities. Research results will also be beneficial to other regions of Alberta and Canada.

Contact: Sandra Cooke
(403) 427-3397

Alberta's 1997 agri-food exports

Alberta's international exports of raw commodities and processed agri-food products reached a record $5.0 billion in 1997, up marginally from $4.9 billion (revised) in 1996. From a national perspective, Alberta accounted for one-quarter of Canadian total agri-food exports, valued at $20.7 billion.

"The upward trend towards value adding exports continued in 1997," says Barbara Pekalski, acting trade statistician with Alberta Agriculture, Food and Rural Development. "Exports of value- added processed products rose 13.9 per cent to $1.9 billion. At the same time, exports of raw farm products dropped 6.3 per cent to $3.1 billion from $3.3 billion (revised) in 1996. This was the first decline during the last five years (1993 to 1997). Although exports of raw commodities remain higher than value-added exports, the proportion of raw products continues to decline."

In 1988, revenue from exports of raw farm products represented 75 per cent of Alberta's total agri-food exports, compared to 62 per cent in 1997. During the same period, the proportion of value-added products increased from 25 per cent to 38 per cent in 1997. These trends reflect the growing importance of value-added processed products in Alberta's agri-food exports.

Top 10 commodities, accounting for 78 per cent of the province's 1997 total agri-food exports, were:

- wheat ($1,379 million)
- beef and veal ($691 million)
- live cattle ($661 million)
- canola seed ($444 million)
- barley ($226 million)
- pork ($177 million)
- raw hides and skins ($161 million)
- oilseed cake and meal ($92 million)
- canola oil ($90 million)
- barley malt ($87 million)

"Wheat remains Alberta's largest export commodity accounting for 27 per cent of total agri-food export revenue in 1997 (down from 30 per cent in 1996)," says Pekalski. "The quantity of exported wheat, at 6.0 million tonnes, rose 15 per cent over 1996. However, reflecting lower grain prices in 1997, export values of wheat declined by seven per cent to $1,379 million. Barley shipments fell 35 per cent to $226 million from the 1996 record value of $347 million. As well, quantity declined 25 per cent to 1.1 million tonnes."

Canola seed exports rose in 1997, both in value (19.2 per cent to $443.7 million) and in quantity (17.1 per cent to 1.0 million tonnes). Increased shipments of canola seed to Japan contributed substantially to this growth. Among the other oilseeds, flaxseed exports showed a strong increase in value (37 per cent) and quantity (43 per cent).

Exports of live cattle were down in 1997 from 1995 and 1996, mainly due to higher domestic slaughter and declined shipments to the United States. The number of live cattle shipped from Alberta to other countries fell 19.0 per cent from the 1996 level to 590,312 head and the value dropped 11 per cent to $661 million. As well, the number of live hogs exported dropped 17.2 per cent to 364,893 head.

"On the positive side, lower exports of live cattle and hogs were offset by increased exports of beef and pork," adds Pekalski. "The value of beef exports rose significantly by 36.5 per cent to $691 million and quantity was up 21 per cent to 216,732 tonnes. Exports of pork were up 17.6 per cent in value and 16 per cent in quantity. Both products continued to be major value-added exports to foreign countries."

Continued on page 3

The primary destination of Alberta agri-food exports remains the United States at $2.4 billion, about half of total international exports in 1997. The next nine largest markets were:

- Japan ($714 million)
- Iran ($201 million)
- People's Republic of China ($151 million)
- Mexico ($135 million)
- Indonesia ($133 million)
- Algeria ($127 million)
- South Korea ($114 million)
- Belgium ($82 million)
- Brazil ($64 million)

These top 10 markets represented 83 per cent of Alberta's value of agri-food exports in 1997, down from 85 per cent in 1996.

"Compared to 1996 export levels, the U.S. market grew 5.6 per cent. Among the top 10 markets, the greatest increase in exports was recorded for Algeria, at 91 per cent, due to significant purchases of wheat," says Pekalski. "Also, exports to Iran rose by 30 per cent from 1996, because of higher wheat sales. These increases were offset by sharp declines in exports to Brazil (down 50 per cent) and China (down 66 per cent). Lower shipments of wheat to these two markets contributed to these declines. The major factor contributing to sharply lower wheat exports to China was the record domestic production of wheat in 1996-97. China was a major buyer of Alberta wheat during the last five years. Exports to Japan (Alberta's second largest market) rose three per cent, while exports to Mexico fell six per cent."

Detailed information on Alberta's agri-food exports is available from the Statistics Unit, Production Economics and Statistics, (403) 427-4011, fax (403) 427-5220

Contact: Barbara Pekalski
(403) 427-5386

Seeding management for direct seeding

With the low amount of snowfall and rain to date, farmers in many areas of the province are concerned about a potentially dry spring. Interest in the practice of direct seeding or reduced tillage is at an all time high across the prairies. However, there are a number areas that farmers are asking about when it comes to reduced tillage and seeding management

"Soil temperature is one subject that comes up repeatedly in talking about reducing the number of tillage passes," says Mark Olson, crop specialist with Alberta Agriculture, Food and Rural Development. "The large majority of farmers believe that tillage is required to warm-up the soil and that later emergence and maturity occurs with direct seeded crops

Studies across Western Canada have shown a one to two degree C difference in temperature of the seedbed in favor of conventional tillage compared to direct seeded soils This difference in seedbed soil temperature between systems disappears by mid summer

"Farmers that have experience in direct seeding handle the seedbed temperature difference in a number of ways," says Olson. "Seeding shallower is a common solution, because of soil moisture reserves right on the surface. Another practice used is a high disturbance seeding pass with wide sweeps on an air-seeder to get some blackening of the soil surface above the seed row. This, in theory, increases the albedo or soil surface's ability to absorb heat and warms the soils faster Disturbance limited to just above the seedrow is probably more desirable since an undisturbed residue layer will result in cooler temperatures between the rows and may create an unfavorable environment for weed growth

"Another factor to consider is the order in which crops are seeded. Cooler season crops, such as field peas, are seeded first since this crop will germinate at lower temperatures than cereals and oilseeds. Farmers seeding into cooler soils will also use a seed treatment to protect the seed and seedling from fungal diseases found in the soil. Last, the use of good quality seed,seed with a high germination and vigor will certainly help eliminate differences between seeding systems."

The handling of large amounts crop residues and chaff is the second concern farmers often ask about. Ideally, chaff and straw management starts with the combine in the fall prior to moving into this system. Even distribution of straw and chaff is paramount since it allows seeding equipment to operate more effectively and provides good soil to seed contact. Soil to seed contact is most important since a condition known as hair pinning, when straw is pushed into the soil stranding newly germinated seedlings from the soil, will result if the straw and chaff is not spread.

"Achieving even chaff and straw distribution this spring will be a challenge," adds Olson. "Harrowing spreads straw, presses loose straw into the soil surface and breaks up piles. However, chaff which makes up 13-35 per cent of the residue doesn't spread very well using conventional harrows, such as the diamond tooth."

Heavy harrows which have aggressive spreading action are one option used by farmers who direct seed. Heavy harrows under the right moisture conditions (usually dry, warm day time temperatures and high speed), will break up stubble and straw and do an adequate job of spreading chaff. Farmers using either conventional or heavy harrows may have to test the field a number of times before environmental conditions allow the equipment to do an acceptable job. A second harrowing operation to achieve good even distribution may be required

Continued on page 4

Farmers using conventional harrows who don't have access to heavy harrows, must use caution since the harrows do not do an acceptable job of spreading chaff. Hair pinning, especially if using double disc seeders, may cause uneven emergence and disastrous results. In these instance a tillage pass before seeding may be the best option.

"As in any new practice on the farm, fine tuning, common sense and experience make the system successful – and direct seeding or reduced tillage is no exception," says Olson.

Contact: *Mark Olson*
(403) 980-4898

More news on an old pest – sclerotinia

Alberta canola producers are familiar with most aspects of sclerotinia. The disease is caused by a fungus. The disease overwinters in the form of sclerotia, which can remain in the soil for at least five years.

"Small, flesh-colored, golf tee shaped structures produce the spores that spread the disease in fields, says Jim Broatch, cereal and oilseed specialist with Alberta Agriculture, Food and Rural Development, Provost. "The disease is promoted by moisture, warm weather and the presence of flower petal remains that act as a food source for the sclerotia. Reduced yields are the result."

If conditions that favor the disease are present and since spores can also be spread by wind for several kilometres, producers can assume the disease is present in canola. A more reliable indicator of disease level is a petal test kit. Timing is important and fungicide application must occur in the 20 to 50 per cent bloom stage, depending on the choice of products. The 20 per cent bloom stage occurs four to eight days after flowering starts and the 50 per cent bloom stage can be up to 14 days after flowering starts but can vary with variety and growing conditions. Both ground and aerial application methods can be used.

"To decide if controls should be used in canola crops, the benefit must out-weigh the costs, which run about $22 per acre," adds Broatch. "Remember that besides a yield advantage, producers should also get higher grades because of more even crop maturity and dry down in the swath, less swath rot, less green seed.

"These decisions are always difficult and made more difficult with the limited time frames, weather influences and product costs. Alberta Agriculture's cereal and oilseed specialists are available and only a phone call away."

Contact: *Jim Broatch*
(403) 753-6871

Brooks to host youth exchange

The communities of Canmore, Cochrane and Brooks will each host a group of 16 young people from Canada, Poland and the Ukraine from September to November, 1998 on a Canada World Youth exchange program. This two and a half month stay in Alberta communities is the first portion of a seven-month learning experience. The second stage takes place in Poland.

"Canada World Youth is a private, non-profit organization that offers young people a non-formal education program based on community and international development," says Gordon Frank, crop specialist with Alberta Agriculture, Food and Rural Development, Brooks. "The program is carried out through exchanges between young Canadians 17 to 20 years-of-age and young people in Asia, Africa, Latin America, the Carribean, Central and Eastern Europe. Funding is provided by private donors and the Canadian International Development Agency (CIDA)."

Since 1971, over 22,000 young people have participated in Canada World Youth's exchange programs across Canada and in over 40 countries. Tens of thousands of people throughout the world have shared this unique learning experience with them and thousands of families and communities have welcomed these young people into their homes and work environments.

"Eight young Canadians were selected from across Canada to participate in the exchange and will be accompanied by a qualified field staff person or project leader who will be responsible for the group," says Marcus Glickman, program coordinator with Canada World Youth, Edmonton. "The Polish counterparts will be chosen from youths involved with the Water Supply Foundation, a private voluntary organization active in rural development in Poland. The Ukrainian youth will be coming from the Ostroh Academy, a small university located in western Ukraine. These eight youths will also be accompanied by a project leader from Poland."

The Canadian project leader arrives in the community in mid-June to begin the project development for the exchange. The 16 participants arrive in the beginning of September.

"The project leader will be looking for host families for the exchange," adds Glickman. "What Canada World Youth primarily looks for in a host family is an openness and enthusiasm to share part of their home life with two young people; in exchange, it is hoped that their lives will be enriched by these new interactions. Each host family will have two exchange participants, one from Canada and one from Poland or the Ukraine. A billeting stipend to host families can be provided by Canada World Youth."

Continued on page 5

For more information about becoming a host family or about the program, contact Glickman or Charlene Ball, program officer, at the Edmonton Office of Canada World Youth (403) 432-1877.

Contact: Gordon Frank Marcus Glickman
(403) 362-1212 (403) 432-1877

Canadian Quality Assurance Program

The Canadian Pork Council (CPC) officially announced the launch of the Canadian Quality Assurance Program (CQA™) in Ottawa on April 8th. In a press conference designed to announce the program to industry partners and the agricultural press, CPC president Edouard Asnong emphasized that the program is a producer-driven initiative to ensure the hogs that leave our farms meet the stringent food safety and quality demands of today's consumers. Asnong also noted that no single group can take on the task of assuring quality. It has to be addressed at every step of the producer-to-consumer chain. The CQA™ program is our producers' contribution to achieving that goal.

Comments by Jim Smith, a producer from Innisfail, Alberta and Chair of the CQA™ Technical Working Committee, explained that this is not a reaction to food safety problems in the industry. Canadian pork products continue to be recognized for quality in markets throughout the world. But in today's highly competitive global food markets, the key to maintaining and building market share lies in meeting customer demand.

"The CQA™ program is based on the principles of HACCP, an internationally recognized food safety concept that requires the identification of potential hazards in the production chain," says Dawn LeBlanc, coordinator of Alberta Quality Pork. "As one of the members of the national Technical Working Committee so aptly described it, the basics of this program are to 'Write it, do it, and record it'. The program has been designed to demonstrate to customers of Canadian pork, both here at home and for our trading partners, that Canadian hog producers are committed to the highest production standards."

The program is completely voluntary. Producers who decide to enrol in the program are required to complete an assessment manual for their farm. This manual puts forward questions for the producer to consider and answer. These may be simple yes/no questions, they may ask the producer to write a protocol, for example for use in mixing feed on-farm or the question may ask the producer to itemize the types of medications that are used on this farm and how they are used. After the manual has been completed, the necessary records as outlined by the program must be kept. When the producer has completed the assessment manual and maintained complete records for a period of no less than three months, he/she may contact their delivery agency or herd health veterinarian (provided that he/she has been trained as a program validator) to arrange for the validation of their records and protocols

"The purpose of this validation is not to "pass" or "fail" a producer based on their replies or record keeping but to work with producers to maintain and raise the quality of an already well-respected product," says LeBlanc

In reference to the record keeping, Smith commented that producers will find those records will help them maintain quality and production consistency in the final product

"Most producers are already meeting the standards set out by the program," adds LeBlanc. "Those producers who may not be meeting all of the standards will find suggested guidelines in the Producer Manual to help them make the necessary changes to meet these standards."

The standards adopted by the Canadian Quality Assurance program include all of those that had been in place for the Alberta Quality Pork (AQP) pilot program plus some additional. This being the case, the CQA™ will be replacing the AQP program but the name will be maintained for the provincial delivery agency. Producers, processors and veterinarians from across Alberta, the Alberta Pork Producers Development Corporation, representatives from Alberta Agriculture, and Fletcher's Fine Foods have played an integral role in the development of both the provincial pilot program and in providing feedback to develop the national program. These groups will continue to be active in providing feedback as the CQA™ program continues to develop

More information will be made available in the coming months on the Canadian Pork Council web site
http://www.canpork.ca

In Alberta, the provincial delivery agency, Alberta Quality Pork, can be reached at (403) 422-4844 or by
e-mail: **Quality.Pork@agric.gov.ab.ca**

"In the coming months, Alberta Quality Pork representatives will be travelling to various areas of the province to conduct information and enrollment meetings with producers, says LeBlanc. "These will be announced in the Western Hog Exchange newsletter, New Fresh News, or contact Alberta Quality Pork for more information."

Contact: Dawn LeBlanc
(403) 427-4844

Direct seeding into sod

Five years of research, by Alberta Agriculture, Food and Rural Development's conservation and development branch research team in Edmonton, led by John Keng, has generated some valuable information that could save producers a lot of time and money. The team studied the agronomics and economics of direct seeding canola, peas, barley and wheat into sod.

"Results from these tests show that planning ahead is advisable," says Eric Oosterhuis, former Alberta Reduced Tillage Initiative (ARTI) agronomist. "Better results will be obtained when the sod field is sprayed the year prior to seeding. A longer time interval between spraying and seeding gives more time for the sod to breakdown. Apply *RoundUp* at a rate of 2.0 litre per acre in the fall or a split application of 1.5 litre per acre in the fall plus 0.5 litre per acre the next spring.

"Forages must be sprayed when the grasses are at least eight inches tall and actively growing. The study included a mixture of 240 ml 2,4-D in the fall applied *RoundUp*. Caution should be used with 2,4-D as residual effects can harm subsequent crop growth of field peas or canola. The forages should not be used for livestock feed if 2,4-D was applied prior to harvesting."

Seed size appears to have a major effect on the success of crops direct seeded into sod. Small seeded crops don't appear well suited for direct seeding into sod. Their shallow seeding depth requirements results in the seed being placed in the thatch layer, resulting in poor seed to soil contact; poor moisture uptake by the seed and, therefore, poor germination, emergence and yield.

"Barley, having an average size seed, is a very competitive crop and appears to be well suited for direct seeding into sod," says Oosterhuis. "Ensure a barley variety resistant to cereal leaf disease is selected as Net-blotch and Scald can transfer from the decaying forage grass roots onto the new barley plant roots. Field-peas that have a very large seed size appear to be very well suited for direct seeding into sod. They are not subject to cereal leaf disease and, because they are inoculated with nitrogen fixing bacteria called *Rhizobia*, they generate the best net return for producers."

Nitrogen fertilizer requirements for crops direct seeded into sod tend to be quite high, around 90 pounds per acre of actual N. The microbes or microscopic sized insects living in the soil that break down the forage residues, feed on the N–fertilizer as a source of energy and then return to breaking down the forage residue. These microbes tend to "tie-up" the nitrogen fertilizer resulting in nitrogen not available for crop growth until a later period.

"Properly inoculated field peas form pinkish nitrogen-fixing nodules on the roots of the pea plants," adds Oosterhuis. "These nodules contain bacteria organisms called rhizobia. The rhizobia fix nitrogen from the atmosphere and supply it directly to the pea plant. This symbiotic relationship between the rhizobia and the pea plant eliminates the nitrogen tie-up fertilizer N. The cost to inoculate field peas is much cheaper compared to fertilizing."

The research study also involved a comparison of two different types of direct seeding equipment. They compared a zero-till machine using a John Deere 750 series drill equipped with disc type openers to a low disturbance direct seeder using a Harmon air-drill equipped with narrow hoe type openers. The results reflected that the small amount of soil disturbance experienced from the narrow hoe type openers created a better seed to soil contact environment for all of the crop types studied as they tended to yield slightly higher than the crops seeded with the zero till 750 series drill.

"For more information on direct seeding into sod contact your nearest ARTI agronomist or Alberta Agriculture specialist," says Peter Gamache, ARTI program manager.

Contact: *Peter Gamache*
ARTI program manager
(403) 427-3361

Agri-News Briefs

Fertilize grass to increase yield

A grass yield of two tons per acre removes 70 pounds of nitrogen, 20 pounds of phosphorus, 90 pounds of potassium and 10 pounds of sulphur. In order for a grass stand to maintain itself, these nutrients must be replaced. If adequate fertilizer isn't used, three to five years of continuous forage production can deplete soil nutrient reserves and cause a serious nutrient deficiency. Soil test to determine levels of nutrients required. Nitrogen will be the main nutrient component, but applications of phosphorous have also shown benefits of increased yield. Broadcast applications are common for hayland and the largest benefit is seen when fertilizer is applied early in the spring. Either 34-0-0 or 46-0-0 can be used as a nitrogen source although 46-0-0 should only be used when air and soil temperatures are cool and ideally when rainfall is imminent. Fertilizer benefit is always the best under good moisture conditions, but a well-rooted grass stand provided with adequate nutrients will make better use of limited moisture. For more information, contact Ross Hutchison, forage specialist with Alberta Agriculture, Food and Rural Development (403) 826-3388, Bonnyville, or any of Alberta Agriculture's forage specialists.

Direct seeding in wet years

The proceedings from the January 15, 1998 Direct Seeding in Wet Years conference are now available. Approximately 120 people from across the Peace region attended the workshop held in Fairview. The workshop was sponsored by Alberta Reduced Tillage Initiative, Peace Region Alberta Agriculture fieldmen, Alberta Environmentally Sustainable Agriculture, Monsanto, Farm Credit Corporation, Ducks Unlimited and Fairview College. For more information or a copy of the proceedings, contact John Zylstra, conservation coordinator, with Alberta Agriculture, Food and Rural Development, Peace region, (403) 835-2291.

Farm Operations Cost Guide

The ***1998 Farm Operations Cost Guide*** (Agdex #825-1) is now available. The survey summary organizes and reports 1997 custom rates for certain custom operations on Alberta farms. Farmers may find custom rates useful as a guide for machinery management, budgeting and financial planning for credit needs. The custom rates can also be used as a guide in negotiating settlements for work performed. Lenders, educators, government institutions and others doing budgeting or planning analysis may also find custom rates helpful. Along with the custom rates survey summary, the Guide includes a farm machinery cost guide and a section on calculating farm machinery costs. The Guide, $5 plus GST, is available at all Alberta Agriculture offices or through the Alberta Agriculture, Publications Office, 7000 - 113 Street, Edmonton, AB T6H 5T6 Credit card orders, VISA or MasterCard, call toll free 1-800-292-5697. Add $2 plus GST for shipping and handling for all phone orders.

Pulse challenge

The Alberta Pulse Growers Commission is holding an incentive program for first time growers to try 40 acres of pulses crops in their rotation. A 25 per cent discount is available from participating seed suppliers, including seed treatment: Cyanamid for Odyssey or Bayer for Sencor; and MicroBio Rhizogen for SelfStik inoculant. Discounts are available to growers who:

- have never grown a pulse crop (peas, beans, lentils);
- have not grown a pulse crop since 1992; and,
- are existing pulse growers and want to try a new pulse crop.

For more information, contact the Pulse Challenge, Alberta Pulse Growers Commission (403) 986-9398

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 7104

Agri-News

MAY 14 1998

May 11, 1998

Dutch elm disease awareness week

Dutch Elm Disease (DED) has killed millions of elms throughout North America since its introduction in 1930. The disease is on the move in the south eastern corner of Saskatchewan according to 1997 surveys where thousands of elms were infected last year, and it is also being fought in Montana. Alberta still has the largest DED-free stands of American elms in the world.

"The week of June 1-5, 1998 has been proclaimed ***Dutch Elm Disease Awareness Week*** in Alberta by the Minister of Alberta Agriculture Food and Rural Development, Honourable Ed Stelmach and by the Society to Prevent Dutch Elm Disease (STOPDED)," says Janet Feddes-Calpas, Dutch Elm Disease Coordinator, with the Crop Diversification Centre – South, Alberta Agriculture, Brooks. "STOPDED, a nonprofit organization, and Alberta Agriculture are working partners in keeping Alberta free of this deadly disease and its costly consequences. They are asking the assistance of the general public to help save our beautiful American elm trees."

STOPDED members include nurserymen, landscapers, commercial and municipality arborists, provincial and municipal parks staff, research scientists, and other interested Albertans. The goal is to preserve and protect the Alberta elm trees from DED.

In March of 1997, STOPDED received funding from Human Resources Development Canada (HRDC), to provide new and sustainable employment opportunities within STOPDED's Prevention Program. As a result of this funding, STOPDED has hired personnel on a province-wide basis.

"STOPDED employees are presently completing a province-wide elm inventory, recording the condition and size of each tree and increasing public awareness on DED in all municipalities," says Feddes-Calpas. "A complete elm inventory supplies the basic information necessary for an effective management program should DED appear in Alberta The information will identify areas where intensive surveillance is necessary due to the number and/or condition of the elm trees. A more accurate dollar value of the elms can also be made using the inventory information

Cont'd on page 2

This Week

Dutch Elm Disease awareness week 1

Control of leaf and berry spot disease 2

Protecting livestock from coyotes 3

Water wells that last 3

New Alberta Agriculture videos spark interest 4

4-H gives youth the edge on careers 4

Canadian 4-H delegation chosen for travel to US 5

Opportunities and profits 5

Briefs 6

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

"DED is a disease caused by a fatal fungus that clogs the elm tree's water conducting system, causing its leaves to wilt and the tree to die, usually within one or two seasons. The fungus which affects all species of elm is spread mainly from one tree to another by two species of insect vectors, the smaller European elm bark beetle, and the native elm bark beetle. These two beetles are attracted to elm trees that are dying or have recently died from stresses such as DED to breed. Once they have pupated and turned into adults they leave their brood gallery and fly to healthy elms to feed thus transporting the fungus on their bodies from one tree to the next."

For this reason, it is important that elm firewood not be transported into or within Alberta as it may be harboring the bark beetles that carry the deadly DED fungus. Firewood is also confiscated at all the Alberta-Montana border crossings. Monitoring for the beetle is done every year throughout the province. Although DED has not been reported in Alberta, the smaller elm bark beetle has been found in Calgary, Edmonton, St. Albert, Strathcona County, Vauxhall and High River.

"All municipalities are being encouraged to develop a DED prevention program," adds Feddes-Calpas. "A DED Response Plan has been completed for the province of Alberta outlining the responsibilities of organizations in the management of DED."

STOPDED is asking the public to:

- Take preventive measures by keeping your elm trees healthy, vigorous and properly pruned.
- Water elms well from April to mid-August. To allow the tree to harden off for the winter, watering should be stopped mid-August followed by a good soaking or two before freeze-up.
- Remove dead branches and trees that provide beetle habitat. Since elm bark beetles are attracted to fresh tree wounds, pruning should be done between October 1 and March 31 when the beetles are not in their active stage.
- Dispose of all elm wood. Take it to local landfills or burn, bury or chip it, because elm wood provides ideal breeding sites for the tiny elm bark beetle that spreads Dutch elm disease.
- Learn how to identify the signs of Dutch elm disease and beetle activity so that you can report them to the nearest DED Hotline. Symptoms usually appear in mid-June to mid-July when the leaves wilt or droop, curls up and become brown. Leaves on trees infected later in the season usually turn yellow and drop prematurely. All these symptoms are accompanied by brown staining in the sapwood, just below the bark.
- Become more involved in the preservation of elm trees, become a STOPDED non profit organization member.

DO NOT:

- DO NOT store elm firewood!
- DO NOT transport elm firewood!
- DO NOT prune elms between April 1st and September 30th!

Until there is a cure, **prevention remains the most effective form of control**. For more information on Dutch elm disease or the DED prevention program visit the STOPDED Internet site at **http://www.agric.gov.ab.ca/crops/trees/ded.html** or call the hotline closest to you.

Brooks	(403) 362-0271
Medicine Hat	(403) 529-8333
Calgary	(403) 221-4686
Red Deer	(403) 342-8234
Edmonton	(403) 496-6905
Strathcona County	(403) 467-5800 (ext: 3315)
Lethbridge	(403) 320-3075
St. Albert	(403) 459-1592
Lloydminister	(306) 825-6184

Provincial DED Hotline – Toll free 310-0000 and ask for 362-1300

Contact: Janet Feddes-Calpas
(403) 362-1337

Control of leaf and berry spot disease

The successful joint effort between saskatoon berry growers and Alberta Agriculture Food and Rural Development researchers resulted in the development of an effective control measure of Entomosporium leaf and berry spot disease of saskatoon berries.

"The disease caused significant economic losses to saskatoon growers in previous years. The losses from this disease, however, are now a thing from the past," says Dr. Piara Bains, research scientist/plant pathologist with Alberta Agriculture, Food and Rural Development. "Alberta growers provided research funds, helped to obtain research funds from other funding agencies and provided free access to orchards to conduct the research."

Although there is always room for improvement, saskatoon growers are satisfied that effective measures have been developed to control this disease. An integrated management approach was taken to combat this disease.

"Research on control strategies resulted in the registration of two fungicides by Pest Management Regulatory Agency, Health Canada," says Bains. "The fungicides are Topas 250E (propiconazole) and Kumulus DF (sulphur). Integrated

Cont'd on page 3

control strategy also included the evaluation of susceptibilities of various saskatoon cultivars to the pathogen and evaluation of the role of litter in disease development."

The result of this successful joint effort is that there is now a very reduced risk of the disease. Growers can experience full yield potential from saskatoon bushes without the losses caused by this disease.

Contact: Dr. Piara Bains
(403) 415-2302

Protecting livestock from coyotes

Spring time means calving and lambing on many Alberta farms. It's also a time when farmers should be closely watching to see that stock, and the new offspring, are appropriately protected from coyotes.

"Unfortunately, dozens of young and newborn calves and lambs are injured or killed by coyotes every year because they are not adequately protected," says John Bourne, vertebrate pest specialist with Alberta Agriculture, Food and Rural Development, Vermilion. "Young livestock are very vulnerable and require close attention during the first few weeks following birth.

Once coyote predation on lambs and calves begins it can be difficult to control, which puts other animals at risk as well. The best way to control coyote predation is to prevent it. There are many steps farmers can take to help prevent coyote predation. Here are a few recommendations:

- Remove all dead livestock, stillborns and afterbirths from the farm property. Burn, deep bury and lime cover dead stock or have them taken to a rendering plant.
- Always confine cows and ewes that are about to give birth, particularly those with their first born. Ewes with lambs should be confined for at least two weeks after birth; cows and calves at least one week.
- Keep fences well maintained, particularly barrier fences of multi-strand design (high tensile steel wire) or woven wire. Barrier type fences can be electrified by adding a single strand of electric wire at the base of or above the fence. Coyotes prefer to dig under or pass through a fence so the fence wire must be as close to the ground and as tight as possible. Remember, holes in or depressions under page wire fences or leaning or loose wire fences are not much of a deterrent to coyotes.
- Electric fences made of seven or more strands of high tensile steel wire with good grounding and a powerful energizer will help keep coyotes out. Such fences can last as long as conventional woven wire fences and cost less to build.
- Confine livestock at night in lighted corrals where the risk of predation is high. Avoid pastures where predation is severe, at least until young animals are several weeks old
- Use guard animals such as donkeys or, dogs to protect livestock. Guard animals need to be properly introduced to livestock before placing them in a herd or flock. For best results consult a reputable breeder
- Removing coyotes by using a firearm, traps or snares, where legal, will keep coyotes away. Check with municipal or provincial authorities beforehand. Calling and shooting or hunting coyotes is another good way to protect your property. Always keep your firearm sighted in and ready for use.

More information is available in two publications: **Preventions and Control of Coyote Predations**, $5 plus GST, and **Fencing with Electricity**, $10 plus GST. These publications can be purchased at all district offices of Alberta Agriculture or through the Publications Office, 7000 - 113 Street, Edmonton, AB T6H 5T6. Call toll free 1-800-292-5697 for Visa and MasterCard orders. Add $2 plus GST for shipping and handling.

Contact: John Bourne
(403) 853-8225

Water wells that last

The new updated version of ***Water Wells ... that last for generations*** publication is now available in district Alberta Agriculture, Food and Rural Development offices across the province. Copies of this free publication are also available from agricultural water specialists located in the regional Agriculture offices in Barrhead and Red Deer.

"The 90-page water well manual was designed to provide rural Albertans with some basic information on groundwater resources and wells," says Bob Buchanan, agricultural water specialist with Alberta Agriculture. "The manual is intended to assist people in making wise decisions when planning new wells or troubleshooting problems with older wells. Over the years we've found that people don't understand groundwater and wells and this leads to many wells failing prematurely. The manual contains 12 modules that will assist people in understanding the factors that affect groundwater supply and quality. The requirements of a properly designed and constructed water well are also included as well as modules to help well owners manage, maintain and protect their water wells more effectively."

Cont'd on page 4

Alberta Agriculture also has three accompanying videos for rent to clients. The names of the videos are:

• part one	Planning and Construction	$10 plus GST
• part two	Managing and Maintaining	$10 plus GST
• part three	Shock Chlorination	$20 plus GST

Videos are available for sale from the multi-media branch in Edmonton at the price listed. To purchase, call (403) 422-3951. For toll free access outside the Edmonton area, dial 310-0000 first.

The manual and videos were produced jointly by Alberta Agriculture, Food and Rural Development, Alberta Environmental Protection and the Prairie Farm Rehabilitation Administration, with revisions assistance from the Alberta Water Well Drillers Association.

"On behalf of the agencies involved in the development of this information series we hope you will use the manual and videos to help your water wells to last for generations," adds Buchanan. "We welcome any comments or questions you have on the manual or videos."

Contact: Bob Buchanan — (403) 674-8252
Ken Williamson — (403) 340-5324

New Alberta Agriculture videos spark interest

Two new Alberta Agriculture, Food and Rural Development produced videos are getting a lot of attention around the province.

Both ***Handling and Feeding Sheep*** and ***Ins and Outs of Saskatoon Production*** are recent additions to the Alberta Agriculture library and sales systems. "We've had quite a good initial response on both," says multi-media branch information officer, Ken Blackley. "Both contain good, solid information that can help producers get the job done."

The first, ***Handling and Feeding Sheep***, emphasizes the need to understand the animal. "Handling sheep isn't the same as handling other livestock," says Blackley. "Because of their smaller size and easy temperament, they must be dealt with differently than cattle or swine. This video really brings this out, and has lots of good ideas to help producers get a better understanding of what makes a good sheep facility."

The second, ***The Ins and Outs of Saskatoon Production***, is a must-see for Saskatoon producers or those considering get involved with the crop.

"Saskatoon production is really a growing industry here in the province," says Blackley, "And a lot of successful commercial and U-Pick operations owe their success to their planning and to their knowledge about the crop. This video is a real help in this as it shows you what to look for , what to avoid and the steps you can take to ensure a profitable Saskatoon harvest."

Both videos can be borrowed for a small service fee from any Alberta Agriculture district office, or from the central multi-media library in Edmonton. Both are also available for sale from the multi-media branch in Edmonton at a cost of $25 each plus shipping-and-handling and GST where applicable. To purchase, call (403)422-3951. For toll free access outside the Edmonton area, dial 310-0000 first.

Contact: Ken Blackley
Phone (403) 422-3951 or Fax (403) 427-2861

4-H gives youth the edge on careers

The workforce of the 90's is a changing one that often leaves young people faced with harsh realities. Increased competition, fewer jobs, higher mandatory skill and education requirements. Young people must make all the right choices early in order to gain an edge.

"The 4-H program is committed to giving young people that edge and provides training through its National 4-H Careers Conference to achieve this goal," says Carol Sullivan, provincial 4-H communications and marketing specialist with Alberta Agriculture, Food and Rural Development. "The 1998 conference, held in Winnipeg, Manitoba, March 28 to April 5, used industry tours, workshops and speaker presentations to encourage 4-H members to explore and carefully consider the various career opportunities available to them, both in the agriculture sector and other industries."

Alberta's Kim Wieting, a member of the 4-H Busy Brushes Club from Drayton Valley, and Diane Ringle, a member of the DCC Ridgevalley 4-H Beef Club, from DeBolt, joined 18 national 4-H delegates and 33 senior Manitoba 4-H members. They attended the conference, participating in panel discussions, examining careers choices and entrepreneurship. They also received valuable career guidance and employment tips through a job preparation workshop.

"The conference delegates then had the opportunity to put their skills into practice during mock interview sessions," says Sullivan. "Several experienced and high calibre professionals contributed to the conference; Ray Coté of University of Manitoba Career Planning and Placement as well as Lise Tanguay, Human Resources of Monsanto Canada. There was also a panel of young rising entrepreneurs who talked about creating opportunities to build your own future. Delegates also had the opportunity to visit a variety of Winnipeg area businesses and organizations including facilities such as United Grain Growers, the Royal Bank of Canada, the Herzing Career College Institute and the Winnipeg Commodity Exchange."

Cont'd on page 5

The success of any 4-H event is largely due to the generous financial assistance provided by its sponsors. Numerous companies and provincial sponsors support National 4-H Careers Conference. Canadian 4-H Council sponsors providing major support for the 1998 conference included: Prairie Pools Inc., Investors Group, Royal Bank of Canada, Pioneer Hi-Bred Limited, Canada Safeway and Agriculture & Agri-Food Canada. Canadian 4-H Council officials join Manitoba organizers and the 1998 delegates in thanking this year's conference sponsors for helping to develop tomorrow's industry leaders.

Contact: Carol Sullivan
(403) 422-4H4H (4444)

Canadian 4-H delegation chosen for travel to US

Ten senior 4-H members were chosen again this year to represent their province and Canada internationally at the 68th Annual U.S. National 4-H Conference at the National 4-H Centre in Washington, D.C. Congratulations to our deserving Canadian ambassadors which included Albertans Kristi Stelter, Bindloss 4-H Multi Club from Bindloss and Leanne Holt, Thorhild 4-H Crafty Creators from Redwater.

"The conference, held March 26 – April 4, brought together 320 delegates from across the United States as well as our Canadian contingent and other guests from Costa Rica," says Carol Sullivan, provincial 4-H communications and marketing specialist with Alberta Agriculture, Food and Rural Development. "The theme of this year's event was *Network for Action – Are you into It?* The focus, as in the past, was to help chart the future of the 4-H program. The conference is not a workshop where delegates are taught but a working conference that encourages delegates to work together to develop recommendations for change, as well as innovative ideas and approaches that will improve the direction of the overall 4-H program and make 4-H better for future generations.

Delegates participated in consulting group sessions working on issues facing youth such as Making the Transition from School to Career, Community Crime Prevention, Healthy Lifestyle Choices and Serving the Community. Delegates also visited the Canadian Embassy and other points of historical and political interest around Washington, including Capitol Hill. Prior to their US experience, Canadian delegates assembled in Ottawa for an orientation which included tours of Parliament Hill, the Supreme Court and a ceremony at Citizenship Court.

Canadian participation in this prestigious US conference has been fully funded by The Semex Alliance since 1987. Semex, a world leader in livestock genetics, maintains that, "Today's youth are the key to tomorrow's agricultural industry; our best resource and our future." The Canadian 4-H Council, the 1998 delegates, and the more than one hundred delegates who have travelled to the US before them under the sponsorship of The Semex Alliance, are very grateful for their involvement, support and generosity.

Contact: Carol Sullivan
(403) 422-4H4H (4444)

Opportunities and profits

Alberta producers should mark their calendars now and plan to attend **Opportunities and Profits II – Special Crops into the 21st Century**. The new date for the conference is November 1 to 3, 1998, in Edmonton at the Convention Inn South. The conference was originally scheduled for November 11 to 13, but to avoid overlap with other agriculture events, it is now scheduled a week earlier.

"If the interest in the recent hemp symposiums is any indication, there are many producers and processors enthusiastic about special crops and new opportunities" says Wayne Goruk, the special crops conference chair. "Over 500 people participated in the recent hemp symposiums held in Red Deer and Edmonton. People are looking for information and ideas on production, processing and marketing."

Production, processing and marketing information are the key topics on the agenda of the Special Crops conference. There will be more information about hemp. Dr. Stan Blade will share harvesting experiences. Other special crops will also be discussed at length. Pea butter, mustard, medicinal plants, lentils, and herbs and spices are just a few of the crops being featured.

"Researchers, processors and farmers will share experiences," says Goruk. "Producers looking at the potential for profit in Alberta from these special crops will want to attend."

For more information on the conference and registration, contact Goruk at (403) 427-3122.

Contact Wayne Goruk Dr Stan Blade
(403) 427-3122 (403) 422-1789

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 7229

Agri-News Briefs

Spring harvesting strategies for dealing with deer excreta

The Canadian Grain Commission (CGC) encourages farmers to develop strategies to deal with deer excreta in spring harvested grain. Buyers of Canadian grain have made it clear that they don't want to receive grain containing excreta. Some potential strategies might involve:

- preventing deer from accessing grain which is stored in piles on the ground
- cleaning the grain before delivering it to the elevators
- finding alternative markets

Dealing with this material has caused significant problems and slowed grain movement. Various measures have already been taken to deal with these problems. The recently appointed Barley Cleanliness Committee will recommend new measures in the near future. The CGC is the federal agency responsible for establishing and maintaining Canada's grain quality standards. As well, the CGC regulates the grain industry to ensure the integrity of grain transactions. The head office is located at 303 Main St., Winnipeg, Manitoba. For more information, contact Tom Askin (204) 983-2758 or e-mail: taskin@cgc.ca

CWB and OWPMB comparative study

A study, commissioned by Alberta Agriculture, Food and Rural Development, provides information and compares the Ontario Wheat Producers Marketing Board (OWPMB) and the Canadian Wheat Board (CWB). The differences and similarities between the two boards are of interest to farmers in Alberta and across the country. Copies of the 107-page study are now available upon request, at no charge, by contacting the Policy Secretariat Division of Alberta Agriculture, Food and Rural Development, J.G. O'Donoghue Building, 3rd floor, 7000 - 113 Street, Edmonton AB T6H 5T6, or phone: (403) 422-2070.

1998 Provincial Direct Seeding Demonstration

The 1998 Provincial Direct Seeding Demonstration will be held July 7 at the Alberta Reduced Tillage Initiative's (ARTI) direct seeding site just west of Red Deer. On May, 10 to 12 direct seeding drills will seed at the site. The same drills will seed again on July 7. The 80 acre site is a must see for producers. It features not only the direct seeding drills but numerous direct seeded plots. Barley, wheat, canola, peas and forages will be grown in the plots and include some late fall seeded canola and cereals. Producers will be able to see some of the do's and don'ts of direct seeding related to residue management, fertilizer placement and seeding depth. Weed control plots will include Roundup Ready Canola, surface applied, non-incorporated granular herbicides, harvest staging trials, Lontrel/Roundup in canola, and new weed chemistry. Other plots include seed treatments, seeding depths and timing of weed removal and direct seeding into forages. Monsanto, Dow AgroSciences, Westco, Agrium and Agriculture Canada have extensive plots at the site. The Red Deer direct seeding site is located one kilometre west of the intersection of Highway 2 and 32 Street on the west side of Red Deer. The site is open throughout the growing season for self-guided tours. For more information on the site and the equipment field day call Michelle McKinnon at (403) 948-8512.

Pasture school

The Western Forage/Beef Group are holding a pasture school at the Lacombe Research Centre, Lacombe, on June 15 to 17, 1998. Topics covered in the seminar and field sessions include: pasture ecology, grass/legume growth and development, managing pasture production, grazing nutrition, pasture plant identification, pasture fertility and nutrient cycling, pasture production and sustainability, pasture species, and many more. Presenters are leading edge graziers, consultants, forage and beef researchers and extension specialists. Pre-registration with payment is required as attendance is limited. The pasture school costs $240 per person and $160 for each additional family member (includes GST). For further information, contact Cathy Hendrickson (403) 782-8030 or Grant Lastiwka (403) 782-8028, Lacombe.

Agri-News

MAY [illegible] 1998

May 18, 1998

Ellerslie beef cow research project

Cow/calf production has accounted for a very small percentage of beef production research. The majority of research done in support of the beef industry focuses on the feeding sector and as a result great advances have been made in this area.

"The cow/calf sector of the industry is faced with many challenges and has a much lower level of support in terms of production related research," says Brian Koberstein, beef specialist with Alberta Agriculture, Food and Rural Development, Wetaskiwin. "The past 20 years have shown a continuing rise in input costs and the price of calves hasn't kept pace. This means that cow/calf producers have had to find production enhancing or cost saving ways to raise calves. Producers have been forced to find ways to improve production efficiency to stay in business. Cost of production surveys conducted over the past 10 years, generally show very tight profit margins."

The Ellerslie Beef Cow Research project, a cooperative effort between the University of Alberta, Alberta Agriculture's northwest region beef specialists and the Lakedell Agriculture Society, was instigated to find ways to reduce the overall cost of producing calves to increase profit margins and return to investment. The project focuses on the highest single variable cost in producing a calf, feeding the cow through the dormant season, winter feeding during the cow's dry period. The initial goal was to compare winter feeding strategies and the types of cows being fed.

"During the first year, 24 producers from across Alberta contributed 200 cows to be fed at Ellerslie," says Koberstein. "The cows were fed in 50 groups of four. They were sorted by biological type (British, British-Continental cross and Continental), body condition (fat, moderate and thin) and body weight. The goal was to have all cows in a moderate body condition (condition score 3) at the end of the trial, March 2, 1998. In other words, the thin cows were fed to gain, the fat to lose and the moderate to hold condition.

"The thin cows cost 32 per cent more to feed than the fat cows. The thin cows gained 1.02 pounds per day, moderate cows gained 0.71 pounds per day and the fat cows gained 0.60 pounds per day while on test. These are preliminary results as the statistical analysis hasn't yet been completed."

Data is being analyzed and a summary paper will be published upon completion. It is anticipated that the summary paper will be available by late summer, 1998.

Contact: *Brian Koberstein*
(403)361-1240

This Week

Ellerslie beef cow research project 1
Reminders for breeding season 2
Where vegetables come from 2
Summer-like weather in April 2
Selections '98 sends 4-H members Motorin' on their Way 3
Briefs 4

Agri-*News* **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**
Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca
Alberta
AGRICULTURE, FOOD AND

Reminders for breeding season

A sound health program and good nutrition are standard requirements of any breeding program. Reproductive performance is poor in cows with low level energy rations during the last trimester of pregnancy.

"Cows that are maintained with adequate to high levels of nutrition have excellent reproductive performance," savs Trevor Yurchak, beef specialist with Alberta Agriculture, Food and Rural Development, Athabasca. "Sound health programs, while always important, are absolutely necessary in cow/calf operations and become even more important in an artificial insemination (AI) program.

"When poor management is responsible for the lack of good cattle condition, estrus synchronizing will not enhance overall pregnancy rates, increase conception or benefit reproductive performance in non-cycling or subfertile cows. Producers must remember that performance is influenced more by environmental factors than genetic factors."

During the breeding season, it is wise to keep cows distributed over the feed resource so the nutrient level is kept high. At this time of the year, observation and management are essential. Breeding season is labor-intensive when some of the most important 'riding' is done.

Reproductive efficiency has a great impact on the economic returns of a ranch. Good management and record-keeping can shorten the calving season resulting in a more efficient use of income and labor.

"Fertility records are the easiest of all performance records to keep," says Yurchak. "They show the level of management and environment more accurately than any other record a producer can keep. All cows that lost their calves or didn't calve should be marked."

As well as providing the necessary nutrition, producers should make sure that a mineral-salt mixture is available for the cattle and that the mixture has adequate levels of minerals for preventing problems, such as grass tetany.

Contact: Trevor Yurchak (403)675-2252

Where vegetables come from

Vegetable research and industry development activities at the Crop Diversification Centre South (CDCS) in Brooks support a growing industry of market gardeners, commercial growers and processors in Alberta.

"Many consumers fail to appreciate or even understand that there are over 10,000 acres of vegetables grown and marketed in Alberta," says Shelley Barkley, information officer CDCS, Alberta Agriculture, Food and Rural Development. "Produce at farmers' markets is easily identified as locally grown. However, at the retail store the consumer is faced with a wide range of fresh and processed vegetable products that are not clearly identified as having come from a farm in Alberta."

Lack of consumer knowledge greatly hurts the industry in Alberta. Considerably more growth could be gained if consumers were more familiar and loyal to buying Alberta grown vegetables.

"Research into the production of vegetables in southern Alberta has achieved growth in close to 17 crops marketed in the province," says Barkley. "The most successful crops in terms of acreage grown and volume sold are carrots, cooking onions, cabbage and sweet corn. The testing of varieties on an annual basis is required to keep consumers exposed to the best culinary and nutritional qualities available in vegetable crops. Annually, there are over 500 varieties in 17 crops on trial at the CDCS research farm. The producers of these crops are then exposed to these most productive varieties through workshops, tours, and written facts on their merits. Once the producer grows these varieties at the farm, the consumer buying locally grown produce can enjoy the freshest produce available."

Aside from testing varieties for local adaptation, research efforts directed at answering production problems that producers encounter are investigated. Fall planting of garlic; planting techniques that could contribute to earlier production of celery; the influence plant density has on carrot root sizing and yield; are only a part of the production research activities undertaken at CDCS.

Farm visits by the crop specialist are designed to assist producers with direct farm consultation relative to production and marketing problem.

"Some of the best vegetables come from Alberta. Astute consumers will look for the ***Made in Alberta*** symbol on the cello package," adds Barkley. "That's the first and most valuable identifying mark that the product comes from Alberta producers. The second identifying mark is to look for the Canada grade standard. If the Canada grade terminology is used, the consumer can be assured it is a product that is at least grown in Canada. The name and location of the packer helps to further identify produce origin. An Alberta address or location provides further evidence the product is likely of local origin."

Contact: Shelley Barkley (403)362-1305

Summer-like weather in April

Dry conditions continue as Alberta experiences summer-like weather in April with above normal temperatures and near normal precipitation.

"Most locations reported near to above normal temperatures in early April," says Peter Dzikowski, agri-weather specialist with Alberta Agriculture, Food and Rural Development.

Cont'd on page 3

"Temperatures were above to well above normal during the second half of April."

The provincial average temperature was 2.7 degrees above the 1961 to 1990 average of 4.0 degrees C. These averages are based on data recorded at 62 Environment Canada climate stations across Alberta.

All Alberta locations reported above normal monthly average temperatures. Temperatures ranged from 0.6 to 4.2 degrees C above normal. Temperature departures of 2.8 to 3.9 degrees above normal were reported in the Peace region.

The provincial average precipitation of 28.0 mm was 1.7 mm above the 1961 to 1990 average of 26.3 mm.

"The central and north east regions reported above normal precipitation, the southern and north west regions reported near normal," says Dzikowski. "The Peace region reported below normal precipitation totals. Provincially, amounts of 6.6 to 69.5 mm, or 21 to 307 per cent of normal were reported."

Wainwright CFB reported the greatest precipitation departure with 63.8 mm or 305 percent of normal. On the dry side, Peace River Airport reported 1.1 mm of precipitation in April, only 7 per cent of it's long term average.

You can find more details at the Alberta Agriculture Internet site: **http://www.agric.gov.ab.ca/navigation/sustain/climate/index.html**

Contact: Peter Dzikowski (403)427-3594

Selections '98 sends 4-H members Motorin' on their Way

The annual Alberta 4-H Selections program was held in Olds on May 1 to 4, 1998 and 142 senior 4-H members attended. This year's theme, ***Motorin' My Way*** focused on the busy and fast-paced lives of senior 4-H members. Delegates listened to several guest speakers and participated in small-group sessions designed to improve management of time, finances, stress and life challenges.

"The Selections program has a two-fold purpose, one of which is that it provides senior members with opportunities to network with other 4-H members from around the province in an educational context," says Marguerite Stark, provincial 4-H programs specialist with Alberta Agriculture, Food and Rural Development.

"Members are their own experts on the challenges they experience every day. These delegates gain valuable knowledge and understanding from sharing with their peers," reflects program administrator, Shari Hanson. This philosophy was reflected in the small-group learning opportunities provided throughout the weekend.

Keynote speaker Jesse Wallin of the Red Deer Rebels hockey team spoke from his own experiences. Wallin moved away from home at the age of 16 and lost his father that year Recently drafted to the NHL, Wallin spoke to 4-H members about stress management, goal setting and maintaining perspective in life. He encouraged the delegates to become informed, involved, and never turn down an opportunity to invest in themselves.

Bryn Theissen of Sundre entertained delegates with cowboy poetry to emphasize the importance of humor in managing stress. Sue Audenaert of the Alberta Treasury Branches – Olds, answered delegates' questions on money management and other financial issues. Guest speaker Tracy Tarves gave an engaging presentation on her personal challenges and experiences studying shorebirds in the Sub-Antarctic. As a volunteer, Tarves lived in isolated conditions for six months with fellow researchers. She challenged delegates to take advantage of opportunities. "Volunteering may cost you something, but the rewards are threefold," said Tarves

The other main goal of the Selections program is to recognize the most outstanding 4-H members in the province of Alberta Delegates were evaluated throughout the weekend by their facilitators and peers for their leadership, cooperative behavior, maturity, confidence, communication and knowledge. Former 4-H experience and community involvement was also considered in the selection process. All 4-H members present were congratulated for their accomplishments. Special recognition was also given to the sponsors of the Selections program, Lammle's Western Wear, Agriculture and Agri-Food Canada and Alberta Agriculture, Food and Rural Development.

Vanessa Belair of Fort Saskatchewan was selected from the delegates as the 1998 recipient of the prestigious Alberta 4-H Premier's Award. Belair was presented with an award trophy by Richard Marz, MLA Olds-Didsbury-Three Hills, on behalf of Premier Ralph Klein, who will make an official presentation at a later date. Belair, an active member of the Gibbons Light Horse Club, becomes one of 15 4-H Ambassadors chosen to promote 4-H throughout the province.

Fifty-nine other delegates were chosen to represent the province of Alberta on 12 major exchanges and tours throughout Canada and the United States. These members will be given many opportunities in the next year to increase their awareness of North American lifestyle, agriculture, government, business, and international affairs.

For more information, visit the Alberta Agriculture, Food and Rural Development web site at:
http://www.agric.gov.ab.ca/ruraldev/4h

Contact: Marguerite Stark Carol Sullivan
(403) 948-8510 (403) 422-4H4H (4444)

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 7344

Agri-News Briefs

Directory of organic food producers and processors

The 1998 Alberta Organic Food Producers and Processors Directory is now available. The directory gives current information so that producers and processors in the province can keep in contact with each other. It's also an excellent first-line of contact for potential buyers of Alberta organic products. The directory is a joint initiative by Alberta Agriculture, Food and Rural Development, the Organic Crop Improvement Association and Alberta's organic producers and processors and the information presented is based on membership details supplied by the respective organizations. For further information or a copy of the directory, contact Gregory Wolff (403) 422-4912 or Mike Dolinski (403) 422-4873.

A Dairy Dozen Years!

The 12th Annual Alberta Dairy Congress (ADC) is scheduled for June 3 to 5, 1998 at the Black Gold Centre, Leduc. The three-day congress features: Holstein, Jersey and goat shows; a separate junior dairy show; peewee showmanship class; milk drinking contest; free pancake breakfasts; trade show and BBQ. A new feature this year is Product Information Sessions by exhibitors and sponsors of the ADC. Sessions run at different times throughout the congress and are designed to give businesses a chance to show current and new products or services. This year's Holstein and Jersey sales, on Thursday evening, features Holsteins selected from the Master Breeder Herds of Alberta in addition to other high quality consignments. For further information contact the ADC at (403) 986-8108 or check the ADC webpage at: **http://www.rdke.com/albertaholstein/shows.html**

Dairy Day – open house

The University of Alberta, Alberta Milk Producers and Alberta Agriculture, Food and Rural Development are holding a Dairy Day – Open House on June 12, 1998 at the Dairy Research and Technology Centre, Edmonton. Formal presentations will be made on the subject of: selecting barley varieties to maximize grain and forage production; feeding management of grains and forages for production, health and reproduction; and, designing milk to meet consumer demands. Attendees are welcome to participate in workshops and panel discussions, view interactive research demonstrations and take a tour of the Dairy Research Centre. For further information or to register, contact Sharon Katzeff (403)492-9565, fax (403) 492-4265 or e-mail **skatzeff@agns.ualberta.ca**

Three new herb factsheets

Three new factsheets are now available to help Alberta producers considering fenugreek, dill and caraway production in Alberta. Herbs are attracting a lot of attention as alternative crop possibilities in the province. When considering a new, specialized crop there are several variables producers need to be aware of. It is always beneficial to research a new crop variety before planting it. The factsheets cover many aspects of these three herb crops, general description, how they adapt to different soil types and moisture conditions, their uses, special agronomy information specific to the crop and weed, disease and insect management. The factsheets are available at all Alberta Agriculture district office and at the publications office, 7000 - 113 Street, Edmonton T6H 5T6. Ask for: ***Dill*** – Agdex #147/20 3, ***Caraway*** – Agdex #147/20-4 and ***Fenugreek*** – Agdex #147/20-5.

Water quality monitoring report information meeting

A meeting is being held on June 3, 1998 at the Red Deer Lodge to discuss the CAESA Water Quality Monitoring Report and future endeavors in the field of water quality as it relates to the agriculture industry. The meeting will provide additional information about the report released earlier this year. Researchers who contributed to the report will make presentations on their individual projects and future plans for monitoring and extension. The meeting is open to anyone in the agriculture industry interested in learning more about agriculture's impact on water quality. The cost is $20 and payment for registration will be accepted at the door. For further information or to pre-register before May 29, contact Tara Donald, regional conservation technician in Barrhead, at (403) 674-8255, fax (403) 674-8309, e-mail **tara.donald@agric.gov.ab.ca** or Michelle McKinnon, regional conservation agrologist in Airdrie, at (403) 948-8512, fax (403) 948-2069, e-mail **michelle.mckinnon@agric.gov.ab.ca**

Agri-News

MAY 27 1998

May 25, 1998

Mobile Air Quality Lab

Sniffing out and measuring odors from intensive hog operations is what the Mobile Air Quality Laboratory was designed to do. The Lab was unveiled on April 30, 1998 at the Alberta Research Council's (ARC) site in Vegreville. The work to produce a facility for detecting and quantifying odor, was part of a year-long joint venture between ARC, Alberta Pork Producers Development Corporation, the University of Alberta and Alberta Agriculture, Food and Rural Development.

"Alberta Agriculture actively partners with industry and research facilities to address public concerns. The odor from intensive livestock operations was one of these concerns that required our attention," says Dr. Terry Church, leader of the livestock expansion and development team with Alberta Agriculture, Food and Rural Development. "Responsible and environmentally sustainable livestock expansion is very beneficial for the province. This lab is a positive demonstration of our on-going commitment to addressing issues that cause public concern."

The lab has two instruments: the Aroma Scan that has the potential to identify types and sources of odors and an olfactometer that measures the intensity of odors. Benchmarks are being set, based on readings from in and around hog barns. Once the sources of nuisance odors in existing operations are identified, the information and benchmarks will be used to create predictive tools. These tools will be used to evaluate odor impact when planning future livestock expansion.

"Over the next six months, a lab team will visit sites around Vegreville and Red Deer to take air samples from hog barns and from just above the surface of hog lagoons," says David Helmer, intensive livestock operations research engineer, livestock expansion and development team, Alberta Agriculture, Red Deer. "Once benchmarks have been set, the lab will be used by Alberta hog producers as they plan new construction or expansion of existing facilities. Using this new technology will go a long way in reinforcing the fact that agriculture industries in Alberta are environmentally aware and willing to use new technology to improve planning and working practices."

cont'd on page 2

This Week

Mobile Air Quality Lab 1
Southern soil and crop diagnostic field school 2
Farmers' Markets in Alberta – a direct channel of distribution 2
Alberta farmers say it's time for change 3
Grazing and range management in the Peace 3
Workshop explores cosmetic ingredients fundamentals 4
Never too early to scout a field 4
Growing better quality trees and shrubs 5
It's time to enjoy Alberta greenhouse grown products 5
Briefs 6

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta Agriculture will coordinate seminars and information sessions to make the results of the sampling available to the industry and the public.

Contact: *Dr. Terry Church* *(403) 422-2522* *David Helmer* *(403) 340-5339*

Southern soil and crop diagnostic field school

The southern Alberta Soil and Crop Diagnostic Field School is being held at the Lethbridge Research Centre from June 19 to July 3, 1998. This is the second year that a diagnostic field school has been conducted at the centre.

"The diagnostic field school teaches hands-on soil and crop management problems and diagnostic techniques to farmers, government and industry agronomists, to help them identify problems associated with today's crop production systems," says Dr. Ross McKenzie, with the agronomy unit of Alberta Agriculture, Food and Rural Development. "This year, the field school is focussing on barley, winter wheat and forage production. Over 500 uniquely different plots will be seeded to demonstrate crop production techniques and problems."

The field school site is located southwest of the Lethbridge Research Centre's main building, south of Goal Road. There will be a number of tours of the plots by the corporate sponsors: Agrium, Cargill, Zeneca, Gustufson, UFA, AgPro and Alberta Financial Services Corporation.

"On June 27 and July 2, individuals can book to go through the intensive training at the field school," says McKenzie. "The registration costs is $175 per person. Sessions are limited to 25 people. To register, contact the Agronomy Unit office in Lethbridge at (403) 381-5126."

There are also three half-day tours planned especially for producers.

- **Forage field day** – June 19 from 1:00 to 4:00 p.m., co-sponsored with the Foothills Forage Association, to register call 1-888-541-6911,
- **Winter wheat field day** – June 26 from 9:00 a.m. to 12:00 noon, co-sponsored with the Alberta Winter Wheat Producers Commission, to register call (403) 328-0059,
- **Barley field day** – June 26 from 1:00 to 4:00 p.m., co-sponsored by the Alberta Barley Commission, to register call the agronomy unit of Alberta Agriculture at (403) 381-5126.

"A number of Agri Canada and Alberta Agriculture research scientists and crop specialists will be on hand to discuss the training modules included in the school," says McKenzie. "The modules are: soil fertility and fertilizers; seed quality and seeding issues; weed control and herbicides; insect identification and crop damage; plant diseases; soil salinity; crop varieties; and, direct versus conventional seeding."

The school is a collaborative effort of both Agriculture and Agri-Food Canada and Alberta Agriculture, Food and Rural Development. It is also funded by a number of corporate and industry sponsors.

"The school is proving to be very successful and a good learning tool for Alberta producers," adds McKenzie. "Plans are already in the works for 1999 when the field school will focus on special crop production."

For more information on the 1998 Southern Alberta Soil and Crop Field Diagnostic School, contact Alberta Agriculture's agronomy unit in Lethbridge (403) 381-5126.

Contact: *Dr. Ross McKenzie*
(403) 381-5842

Farmers' Markets in Alberta – a direct channel of distribution

Farmers' markets are flourishing in Alberta. In 1998 there are 100 markets throughout the province registered with Alberta Agriculture, Food and Rural Development. Although the markets in Alberta are busy and thriving, they are looking at ways to make their markets more successful and ultimately provide increased sales to the vendors and a meaningful experience for consumers.

"In 1996 the Alberta Farmers' Market Association together with Alberta Agriculture, Food and Rural Development and the University of Alberta undertook a study to better understand the benefits and opportunities available to markets, vendors and consumers from farmers' markets in Alberta," says Joyce Lencucha, agri-food development consultant with Alberta Agriculture, Food and Rural Development. "A report on the two-year study, conducted with market managers, vendors and consumers at Alberta approved farmers' markets, is now available. Special thanks to the Central Region – On Farm Demonstration Committee, Agricultural Research Institute for the funding of this research project."

The results of the study provide valuable benchmark data. It provides excellent specific vendor and consumer demographics. The results also answer questions such as why consumers visit farmers' market and what products they are buying, what products vendors are selling, their reasons for selling at the farmers' market and other marketing methods they use.

"The Alberta Farmers' Market Association is organizing regional workshops throughout the province to share research information and discuss ways that local vendors, market managers and communities can use the information to

Cont'd on page 3

improve their markets and service to consumers," adds Marian Williams, rural development specialist – business, Alberta Agriculture. "The workshops also feature an update on the public health review for farmers' markets and there is also an opportunity to view the new video, ***Safe Food Practices for Small Processors***."

Every one interested in marketing through farmers' markets is welcome to attend these workshops, held from 9:30 am to 3:00 p.m. in the following locations:

Lacombe – May 25	Agriculture Building 5030- 50th Street, Lacombe
St Paul – May 27	Provincial Building 5025-50 Street, St. Paul
Taber – June 2	Provincial Building 5011 49 Ave Taber
Grande Prairie – June 9	Provincial Building 10320-99 Street, Grande Prairie

For a copy of the report, more information about the workshops or to register, contact Joyce Lencucha, agri- food development specialist in Red Deer (phone 340-5358) or Marian Williams, rural development specialist – business in Camrose (phone 679-1210).

Contact: Joyce Lencucha Marian Williams
(403) 340-5358 (403) 679-1210

Alberta farmers say it's time for change

Alberta farmers' attitudes, beliefs and directions for change to the grain handling and transportation system have now been documented by the Alberta Grain Commission (AGC). Twelve focus groups were held in February and March, 1998. Farmers were randomly selected within a 100-mile radius of twelve communities, representing a good cross-section of small, medium and large-scale farming operations.

The report, titled ***Alberta Farmers Speak Out About the Grain Handling & Transportation System***, formed a key part of the Alberta Grain Commission's submission to Justice Willard Estey's grain transportation review.

What did Alberta farmers say? Based on the focus groups:

- Alberta farmers want their responsibility and accountability to end when their grain is delivered to the local elevator.
- Alberta farmers want responsible parties, from elevator to port, to be accountable and to reduce the costs and the time from elevator to ship. Alberta farmers need better control of their risks.
- Alberta farmers say marketing issues and solutions can't be separated from handling and transportation issues and solutions. More storage capacity is not the answer. They are increasingly relying on crops that go into the local markets as a way to solve the problems of the handling and transportation system.
- Alberta farmers are tired of the debate over improving the grain export system and are sceptical that improvements will be made or that people will listen.

"The Alberta Grain Commission will continue to rely on farmer input on grain industry issues," says Ken Moholitny, chairman of the AGC. "The Commission is made up of six farmers from various parts of the province and three representatives from the Ministry of Agriculture, Food and Rural Development. The mandate of the AGC is to review any and allmatters relating to the grain and oilseeds sectors, make recommendations to the Minister of Agriculture, Food and Rural Development and to conduct appropriate activities that promote the on-going growth and development of the grains industry."

Copies of the focus group study are available from the Alberta Grain Commission at (403) 427-7329

Contact: Ken Moholitny Brenda Brindle
(403) 427-3078 (403) 427-3077

Grazing and range management in the Peace

Range ecology, grazing forested pastures and tame pastures, logging and grazing, extending the grazing season, animal nutrition and range management planning are some of the items on the agenda for the ***Peace Region's 4th Annual Stockmen's Range Management Course***.

"Six years ago, the Stockmen's Course was started in southern Alberta. For the last three years, a northern version of this course has been offered to Peace Country producers," says Donna Lawrence, range management specialist for public lands, Alberta Agriculture, Food and Rural Development. "This year, the course has expanded to three locations because of it's popularity with producers. By holding courses in these different areas, producers will receive information that is as local as possible."

The afternoon portion of the course, is being held at nearby grazing leases where producers can get hands-on experience identifying range plants, assessing range condition and setting stocking rates.

The Peace stockmen's courses are being held at Goodfare Hall, near Beaverlodge, on June 18; the Agri-Plex in High Prairie on June 23; and, the Rec-Plex in Fort Vermilion on June 26.

"One of the main activities at the course is identifying range plants and knowing which ones are grazed by cattle and which ones aren't," says Lawrence. "It's important for producers to know which plants are used so they can more accurately estimate how much useable forage they have on their pasture and set correct stocking rates."

Cont'd on page 4

Registration deadline for the course is the end of May. To register, call Lawrence or Colin Stone at (403) 624-6345. Registration forms are also available at all Public Lands or Alberta Agriculture office in the Peace Region. Course fee, $50 per person and $75 per pair, includes a Stockmen's Course Binder that is full of range management information (pairs must share a resource binder). Space is limited to 40 participants at each location, so register early.

Contact: Donna Lawrence
(403) 624-6345

Workshop explores cosmetic ingredients fundamentals

An overview of cosmetic ingredients and a better understanding of how those ingredients work for the non-chemist is the focus of an Alberta Agriculture workshop June 15 and 16, 1998 at the Red Deer College.

"Ingredients are the key to how and why cosmetics can improve your skin or scent your bath water. For a beginner cosmetic processor or someone interested in product development who isn't a chemist, understanding ingredients is key to being more comfortable talking about and selling your product," says Joyce Lencucha, agri-food development specialist with Alberta Agriculture, Food and Rural Development and workshop organizer.

Cosmetic processors and product developers are two of the groups this workshop has been designed for. "The workshop is really for anyone who wants a better understanding of the industry, and more particularly about ingredients, their effects and the latest trends," says Lencucha.

Maurice Hevey, the workshop instructor, has 30 years experience in the cosmetic industry and current is president of a product development consulting firm based in Minnesota. Hevey's career started in the development and testing labs of Clairol and Max Factor. Besides product development, he's also worked in quality assurance, process development and control, packaging programs and regulatory affairs.

Hevey will define natural, synthetic, chemical and organic ingredients, introduce you to the language of ingredients, identify ingredient sources, outline ingredient classifications and functions, examine ingredient labeling laws and regulatory issues, describe high performance plant extracts and oils and discuss industry trends. He'll also look at scale up and manufacturing.

Participants will also have the opportunity to showcase their products at an evening session on June 15.

Registration for the two day workshop is $100. One accommodation option for workshop participants is the Red Deer College residence at $23.25 per person.

To register, contact Alberta Agriculture in Red Deer toll-free by dialling 310-0000 and then 340-5364.

Contact: Joyce Lencucha
(403) 340-5358

Never too early to scout a field

The crops aren't even in the ground and field scouting is already being done. Early detection of problems is often key to a successful effect. Many aspects of growing crops are out of a producers control, so it's important to take advantage of situations where meaningful influence can be realized.

"Field scouting usually involves walking a field with a goal in mind," says Ron Hockridge, crop specialist with Alberta Agriculture, Food and Rural Development, Wetaskiwin. "Knowing the problems a crop can encounter and having an idea of when to expect those problems to show-up, helps set field scouting goals. Control action can be taken once a problem is identified, but the first thing is knowing where to look for adverse factors."

In the spring, crop emergence is probably the biggest issue. Observing how even the stand is and doing plant counts gives an indication of whether or not there's an adequate stand. At the same time, checking for seedling diseases and insects can be done. Most importantly, look for germinating weeds. Weeds germinating near the time of crop emergence can cause more yield loss than any other factor.

"When it comes to weed control, one strategy is to establish a thick, healthy crop," says Hockridge. "The theory, borne out by research data, is that a rapidly growing crop suppresses weed growth through competition for water and nutrients. Research done at the Alberta Environmental Centre by Dr. John O'Donovan, concluded that the amount of yield reduction caused by a given weed population is reduced by three per cent for each day that the weeds emerge after the crop. Dr. Neil Harker found that delaying weed removal until after the three-leaf stage of canola plants greatly reduced yields. However, weeds emerging after the canola had three pairs of leaves had very little effect on canola yields."

It's also good to look for nutrient deficiencies early in the growing season. Much of the production potential of cereal crops is determined by the time they are in the five-leaf stage. From that stage on potential can't be improved but it can be lost. If a deficiency is found during field scouting, the producer needs to determine what action to take. Mobile elements, nitrogen or sulphur, can be added and crop response is immediate. For some of the minor nutrients, it's better to wait for the proper stage and apply a foliar spray.

"Producers can't do much if an immobile nutrient, such as phosphorous, is in short supply. What is needed is warmer conditions to make more of the soil bound reserves available

Cont'd on page 5

to the plant.," says Hockridge. "The welfare of crops needs to be looked after through the whole growing season. Field scouting lets producers diagnosis a problem early and that can have a greater effect on yield."

Contact: Ron Hockridge
(403) 361-1240

Growing better quality trees and shrubs

Growing better quality trees and shrubs in Alberta is the challenge undertaken by the nursery crops research group at the Crop Diversification Centres South and North (CDCS and CDCN) and the commercial nursery industry.

"In Alberta, a woody plant crop requires two to 10 or more years to reach salable size," says Christine Murray, nursery crops specialist at the CDCS, Alberta Agriculture, Food and Rural Development. "A single crop of trees must grow rapidly during the short intense season and, before growing mature enough to harvest, may have to survive all of Alberta's climatic extremes; rapid changes in temperature due to Chinook winds, extreme cold, drought and extreme heat. In spite of these challenges, Alberta's nursery growers continue to grow quality products for the market."

At CDCS research programs are designed to deal with many of the significant production issues of the nursery industry. Currently, there are on-going trials evaluating the fertility of field and container-grown trees and shrubs as well as the effectiveness of different container growing media. Since both field and container-grown crops must be overwintered, it's necessary to develop fertility programs that maximize plant growth during the season while also slowing growth in the late summer so the crop will harden off sufficiently to survive the winter.

"A nitrogen fertility trial, to develop guidelines for field-grown deciduous and coniferous species is being conducted under irrigation in Brooks and at a dryland site in Edmonton," says Murray. "For container-grown plants, research is being done to test the efficiency of controlled-release fertilizers that are applied to the crop at planting and release fertilizer throughout the growing season."

Plants grown in containers are not generally grown in field soil but in a medium composed of a number of products which may include: peatmoss, sawdust, bark chips, sand, soil, etc. Researchers at CDCS evaluate the growth of woody plants in different container media. Container media have been composed of various forestry by-products, pulp and paper mill and nursery composts. Horticultural use provides an environmentally sustainable alternative use of these waste products.

"Since 1958, CDCS has been a cooperator with Agriculture and Agri-Food Canada (AAFC) in Morden, Manitoba in the Prairie Regional Trial (PRT) for evaluating the hardiness and landscape quality of woody plants," adds Murray. "New cultivars from the AAFC woody plant breeding program are evaluated as well as some selections from industry.

Since 1983, the nursery crops program, in cooperation with the Landscape Alberta Nursery Trades Association Growers Group, Research Committee and nursery growers from such diverse locations as Fairview, Bowden, Red Deer, Calgary and Coaldale, have been involved with the Regional Woody Plant Test Project (RWPTP). In the trial, new woody plant cultivars and species from around North America are evaluated for hardiness and landscape quality over five seasons, at five nursery sites as well as CDCS and CDCN.

After graduating from either the PRT or RWPTP at the Centre, woody plants are moved to permanent sites in the Golden Prairie Arboretum or Forever Green Pinetum. These collections are excellent living reference material for professional horticulturists as well as the general public. The grounds at CDCS are open to the public daily until dusk.

Results of the RWPTP are available on Alberta Agriculture's Internet site at: **www.agric.gov.ab.ca/crops/trees/rwptp**

Contact: Dr. Christine Murray
(403) 362-1313

It's time to enjoy Alberta greenhouse grown products

Local grocery stores carry a variety of vegetables. To enjoy the taste of a good quality cucumber, vitamin C rich tomatoes and flavorful and juicy peppers make sure that they are Alberta grown.

According to Dr. Mohyuddin Mirza, greenhouse crops specialist with Alberta Agriculture, Food and Rural Development, "Locally grown vegetables are now in the peak of their production. There is no doubt that we grow the best cucumbers, tomato, peppers and lettuce right next to Edmonton in the Lacombe area, in the Redcliff-Medicine Hat area and throughout the province where several small growers have established greenhouses. Most aspects of production are controlled so quality and safety are ensured."

A good quality, raw tomato about three inches in diameter has 25 calories, 2.03 grams of fibre, and 0.2 grams of fat. It will provide vitamin A (25 per cent of recommended daily amount - RDA), vitamin C (47 per cent of RDA), folacin (13 per cent of RDA), niacin (5 per cent of RDA), riboflavin (3.5 per cent of RDA) and thiamin (6.2 per cent of RDA). Tomatoes also provide minerals, like calcium, potassium, magnesium, iron and many others.

Cont'd on page 6

"The production of good quality lettuce is gradually increasing," adds Mirza. "A visit to a farmers' market will show what is being produced locally.

"We grow the best roses in the world, just next door to Edmonton. Alberta's flower expertise isn't limited to roses, but also Asiatic and oriental lilies, alstroemerias and many more."

This is the season of bedding plants. A visit to a greenhouse will prove the value of locally grown plants. When picking out bedding plants, pick plants that are green, compact and close to blooming or already blooming.

Contact: *Mohyuddin Mirza*
(403) 415-2303

Agri-News Briefs

New Video Release....

Marketing food to the public carries a lot of responsibility. The product has to look and taste good and has to be free from contamination. Food safety is a main concern of companies producing food products. Alberta Agriculture, Food and Rural Development has just released a new video, ***Safe Food Practices for Small Processors***. This 25 minute video outlines the basics of good manufacturing practices and points out a number of action steps processors can follow to ensure their product is safe. Emerging businesses selling at Alberta approved farmers' markets or a growing business selling product into the specialty food market will find this video very informative. To borrow the video and accompanying resource kit, contact your local AAFRD office.

Access Asia

Access Asia features 20 Asian buyers accompanied by Trade Commissioners from five countries. The agri-food solo show is being held on June 7 and 8, 1998 at the Blackfoot Inn, Calgary. The event will give Alberta producers a chance to get product feedback, evaluate foreign markets and have one-on-one meeting sessions with buyers. Access Asia is a joint initiative of the Alberta Food Processors Association, Food Beverage Canada, Agriculture and Agri-Food Canada and Alberta Agriculture, Food and Rural Development. Registration deadline is May 29, 1998. For a registration package, contact Justin Sugawara, Agriculture and Agri-Food Canada (403) 495-4144.

AVEC open house

The Research Centre of the Agricultural Value-added Engineering Centre (AVEC) is holding an open house on Friday, June 5, 1998. This open house will interest agricultural processors (food and non-food), researchers, processing service providers and anyone with an interest in agricultural processing. The Centre is located approximately 1.2 km south of Ellerslie Road on 127th Street in south Edmonton. AVEC, a new program of the engineering services branch of Alberta Agriculture, Food and Rural Development, was launched in June, 1997. The goal of the AVEC is to help meet the engineering needs of Alberta's growing value-added processing industry. Funding for this program is provided by the Agriculture and Food Council through the Canadian Adaptation and Rural Development Fund (CARDF). Viewing of facilities, equipment and displays from 1:30 to 5:00 p.m. Opening ceremonies at 2:00 p.m. AVEC's staff and representatives from associated agencies will be on hand to explain details of the program and answer questions. The Centre works with the processing industry to solve agricultural processing problems through research, improve or redesign equipment, provide engineering advice or develop ideas into commercial products or services. For more information about AVEC or the open house, contact (403) 427-8764 or (403) 415-2682. These numbers can be reached toll free from anywhere in Alberta by first dialing 310-0000.

Controlling greenhouse problems

Diagnosing and managing disease and insect problems in greenhouse crops is the subject of a workshop on Wednesday, July 8, 1998 from 9 a.m till 4 p.m. The workshop is sponsored by the Alberta Greenhouse Growers Association and organized by the staff from Crop Diversification Centre North and Alberta Research Council, Vegreville. The workshop provides a lot of practical information for growers and will focus on using biological means to control problems. The workshop will be held at Crop Diversification Centre North, Fort Road and 175 St, Edmonton. The cost is $42.80 and cheques are payable to the Alberta Greenhouse Growers Association. In the morning session the discussion subject is diagnosing nutritional disorders and diagnosing and managing diseases from root rots to leaf spots. In the afternoon the discussion will be *From aphids to whiteflies*. Two of the world's best entomologists, Dr. Ken Fry and Kris Pruski will teach in the afternoon.

Pre-registration is required. For further information, contact Mohyuddin Mirza (403) 415-2303.

Farm Safety and the livestock industry

Alberta Agriculture, Food and Rural Development are producing a set of farm safety modules for the livestock industry. The modules outline the factors involved in farm safety and provide examples, guidelines and tips on making the job of raising livestock as safe as possible. Eventually modules will be produced for all types of livestock including hogs, sheep, goats, buffalo, elk etc. The project is coordinated by Eric Jones of the Farm Safety Program, Wayne Goruk and Marcia Hewitt-Fisher both of Central Program Support. They are currently focusing on the cattle industry, dividing it into three main parts: Cow-Calf, Feedlot and Dairy. The Cow-Calf portion will be completed first. The group is very interested in gathering knowledge on this subject from Alberta producers. If you have information on the safety aspects of the cow-calf industry, please contact Marcia Hewitt-Fisher in Edmonton at (403) 427-3315. This numbers can be reached toll free from anywhere in Alberta by first dialing 310-0000.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 7468

Agri-News

JUN [illegible]

June 1, 1998

Clients give Agriculture staff top marks for service

Alberta Agriculture, Food and Rural Development's regional advisory services (RAS) received top marks from clients in a recent survey of service provided by district offices over the past two years. Client groups interviewed for the survey also said the demand for these services is likely to increase in the coming years.

"Client satisfaction is vital to our service. Meeting the service needs of clients effectively ensures that Alberta Agriculture is able to meet its mandate of helping the agriculture and food industry build a prosperous future in Alberta," says Alan Hall, director, central region, Alberta Agriculture in Red Deer.

The survey conducted by Serecon Management Consulting, an independent consulting firm, involved interviews with 1,022 farmers, 103 agri-businesses, 51 agricultural organizations and associations and 50 value-added enterprises.

"Almost all farmers interviewed had some form of contact with district office staff in the last two years and of them, 83 per cent are satisfied, nine per cent neither satisfied nor dissatisfied and just four per cent dissatisfied," says Lori Nagy, communications consultant with Alberta Public Affairs. "Over 75 per cent of farmers recall a number of benefits from the contacts with staff. Many said they learned a new technique, improved a skill or received a solution to a specific problem. Interestingly, half of the respondents who had been in contact with RAS in the last two years were able to recall a decision or change they made as a result of that contact."

Many different decisions or changes were described, the most frequent were changes to crops and livestock production as well as the use of different pest control chemicals and farm management practices in general. The results of these changes were positive, with 88 per cent saying the change worked out well.

"Farmers indicated the highest levels of satisfaction with the staff's friendliness and helpfulness, confidentiality, knowledge of where to get information, accessibility by phone, knowledge or expertise in their areas of specialization, objectivity, understanding of local conditions and helpfulness in solving immediate production problems," says Nagi. "The majority of specialists and client service representatives met or exceeded the expectations of farmers with an average rating of 83 per cent."

Cont'd on page 2

This Week

Clients give Agriculture staff top marks for service 1

Watch for the yellowheaded spruce sawfly 2

St. John Ambulance teams-up with APGA 2

Land Agents Licensing regulation review 3

Performance-tested Ram sale 3

Pasture minerals 4

Briefs 5

Coming Agricultural Events 6

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

Overall, a majority of farmers believe district services would be missed if the services were no longer available in their area. The high levels of satisfaction with RAS services suggest the move to a specialist system is working.

"The district offices and services of the department were restructured in 1994 in response to the evolving role of government and the needs of the agricultural industry in Alberta," says Hall. "The new, restructured organization is focused on providing specialist services from the 52 district offices. A network of specialists respond to the needs of farmers, agri-businesses, agriculture organizations and value-added enterprises, providing them with expert information and personal service."

RAS is responding to what clients said in the survey by implementing a number of suggestions; including:

- creating a directory of RAS services that will be distributed to all farmers, agri-businesses and processors;
- **providing more agriculture information on the Alberta Agriculture Internet site** <www.agric.gov.ab.ca>;
- upgrading computer hardware and software to enhance district office e-mail capabilities and electronic services for clients;
- offering new courses and seminars; and,
- more partnering initiatives with clients.

As well, 13 project teams have been set up to implement suggestions by clients. These teams will deal with everything from business planning, external promotion, communications, to training and staff development.

The demand for RAS services will increase in the next few years. "Alberta Agriculture is facing challenging times and staff are working together to meet the increasing demand for services. Determining how to maintain and strengthen customer service while maximizing the contribution to the growth of the agriculture and food industry is the primary challenge," adds Hall.

To meet future demands for services, RAS plans to strike more partnerships with agri-businesses and industry organizations, improve the use of technology and continue to find more efficient ways of doing business.

For more information, contact Alberta Agriculture by dialing toll free 310-0000 and asking for the closest district office.

Contact: *Alan Hall* *Lori Nagy*
(403) 340-7611 *(403) 422-5647*

Watch for the yellowheaded spruce sawfly

If you lost the new growth of your spruce last June and all that is left is yellow colored twigs, you'll want to be on the outlook for the yellowheaded spruce sawfly. The insect tends to not move far, in fact, it will often re-infest the same tree.

"The damage begins with only parts of the new tender needles being eaten away," says Shelley Barkley, information officer at Alberta Agriculture, Food and Rural Development's Crop Diversification Centre South, Brooks. "As the pest grows, so does its appetite. Eventually it will eat whole needles, working its way back into the older growth."

Characteristics of an infected tree are shabby appearance and a yellowish-brown color. In severe cases the tree can be stripped of all its needles. Repeated attacks over several years can result in the death of the tree.

"Seeing this insect before it causes sever damage is the first step in control," adds Barkley. "The yellowheaded spruce sawfly is well camouflaged and looks a lot like the needle it is eating. Newly hatched larvae are caterpillar-like and yellowish green in color. They have either a yellow or green head. Mature insects are 2 cm in length with either a yellow or red head. The waxy looking body is green with grey-green stripes running from head to tail. Feeding stops in mid-July when the larvae drop to the ground where they spin a cocoon in the soil to spend the winter."

Controlling this insect is very simple, hand picking or hosing the tree down with water is one option. Chemicals registered for the control of yellowheaded spruce sawfly include, malathion, diazinon and permethrin.

Remember the toughest thing about controlling this pest is actually seeing them.

Contact: *Shelley Barkley*
(403) 362-1305

St. John Ambulance teams-up with APGA

A custom-made ***First Aid on the Farm*** course has been developed through the joint efforts of St. John Ambulance and the Alberta Potato Growers Association (APGA).

"This collaboration was made possible through the hard work and tireless promotion of farm safety by Eric Jones, farm safety specialist with Alberta Agriculture, Food and Rural Development," says Michael J. Cearns, director business development, Alberta Provincial Headquarters, St. John Ambulance. "Roger Jaeger of the APGA was the association contact and he too deserves much of the credit for making this groundbreaking initiative a reality."

Cont'd on page 3

"Farm safety is a very important component of every-day farm life," says Cearns "As a matter of fact First Aid on the Farm courses across Alberta have increased by an astounding 165 per cent in the first quarter of 1998. We encourage all agriculture associations to continue this trend. We hope all farm families and farm workers will remember to work safely. Collectively we can lower injury and fatality rates across the province."

"Alberta Agriculture takes farm safety very seriously," adds Jones. "The department has had a farm safety program in operation for years. Its focus is communicating to Albertans about the safe handling of farm equipment and livestock. Farming is one of the most dangerous professions and farm workers need to know and respect that fact. Always remember, to work safely."

Contact: *Eric Jones* *Michael Cearns*
(403) 427-4231 *(403) 452-6163 ext. 238*

Land Agents Licensing regulation review

The Department of Environmental Protection has initiated a major review of the *Land Agents Licensing Regulation* and the *Land Agents Licensing Exemption Regulation* and would like input. Feedback from the people affected by these regulations is very important to ensure that they are practical and serve their purpose. The regulations are of particular interest to landowners, land agents and industry.

"The *Land Agents Licensing Act* and regulations apply to persons engaged full-time or part-time in negotiating for or acquiring interests in land," says Gerald Kress, Alberta Environmental Protection. "They also apply to persons who charge a fee to offer advice to an owner or his agent with respect to negotiations for or acquisitions of interests in land. Interests in land include interests acquired for right of ways and other surface uses that could be subject to a right of entry order under the *Surface Rights Act* or that could otherwise be expropriated. Typically this includes drilling and mining operations, laying of pipelines and the construction of power lines."

The Act and the regulations provide for: the licensing of land agents, exemptions from the Act, controls with respect to the negotiation process, standards of conduct, powers of the Registrar, the establishment of an advisory committee, penalty assessment and a hearing and appeal process.

"A Discussion Paper has been prepared to help Albertans understand the regulations and the proposed changes," says Kress. "The Discussion Paper can also be made available upon request in an alternate print format, larger print or audio tape for Albertans who require an alternate form of communication."

Albertans can obtain a copy by contacting Alberta Environmental Protection, Land Agents Licensing, 2 floor, South Petroleum Plaza, 9915 - 108 Street, Edmonton, AB T5K 2G8

Albertans interested in providing input should obtain a copy of the Discussion Paper and send their comments in before June 15, 1998.

For further information, or if there are questions, contact Gerald Kress at 427-3570 in Edmonton. In Alberta, government numbers are toll free by calling 310-0000 first

Contact: *Gerald Kress*
(403) 427-3570

Performance-tested Ram sale

The Western Suffolk Sire Reference Program (formerly the Alberta Suffolk Sire Reference Scheme) is holding its first production sale on June 27, 1998 at the Olds Cow Palace.

"At the first sale of its kind in Alberta, 40 Suffolk rams will be offered, including ram lambs and yearlings," says Cathy Gallivan, sheep development advisor with Alberta Agriculture, Food and Rural Development, Olds. "The animals are chosen on the basis of their index for lean growth. Every animal in the sale will have this index, as well as Expected Progeny Differences (EPD) for growth rate, muscle depth and fat depth Rams will be inspected by a veterinarian and must pass a rigorous physical cull."

"The program was started in 1995 to assist Suffolk breeders to select animals for lean growth," says Greg Alexander, president of the Western Suffolk Sire Reference Program. "Members of the program create genetic links between flocks using artificial insemination. In the spring of each year, lambs are weighed and ultrasound measurements of muscle depth and fat depth are taken. The genetic links between different flocks created by artificial insemination allow for the calculation of between-flock EPDs. The EPDs mean that the genetic merit of a ram in one flock can be compared to that of a ram in another flock, even though the two flocks have different management and feeding programs."

The sale will feature animals from each of the seven member flocks, including offspring of *Thistlestone 245E*, an imported British Suffolk ram, and other British bloodlines.

For more information on the program or sale, contact Greg Alexander (403) 948-2271 or Gerry Schalin, program secretary, (403) 556-2802.

Contact: *Cathy Gallivan* *Greg Alexander*
(403) 224-3962 *(403) 948-227*

Pasture minerals

Pasture forages are good sources of calcium, phosphorus and some trace minerals. However, given the expected productivity of livestock, in most areas of the province, it's difficult to meet all of the animal's requirements for macro and trace minerals without some supplementation while grazing.

"The phosphorus content of grasses and legumes is relatively high in the spring and declines as the plant matures," says Terry Holmgren, beef specialist with Alberta Agriculture, Food and Rural Development, St. Paul. "By mid-July, the phosphorus content may be below breeding cow requirements. This may result in a phosphorus deficient diet mid-way through the breeding season. Research has demonstrated that supplying phosphorus on pasture to breeding cows can increase fall pregnancy rates by 10 to 15 per cent."

On grass or legume pasture, a mineral supplement should contain equal parts of calcium and phosphorus, often referred to as a 1:1 mineral. Range minerals also contain certain trace minerals such as copper, zinc, manganese, selenium and can be purchased with or without added salt.

"Be sure to check the level of trace minerals present in a range of mineral supplements," says Holmgren. "Nutrient analysis of legume and grass pastures done by Alberta Agriculture's soil and feed testing lab show that Alberta pastures may be up to 93 per cent inadequate in copper, 69 per cent inadequate in manganese, 94 per cent inadequate in zinc and 66 per cent inadequate in selenium. Keeping this in mind, a trace mineral supplementation program should supply up to 100 per cent of an animal's total requirements."

Alberta Agriculture recommended target levels of 2,000 to 3,000 mg/kg of copper, 8,000 to 10,000 mg/kg of manganese, 10,000 to 12,000 mg/kg of zinc and 30 to 80 mg/kg of selenium in salt and mineral mixes. Addition of trace mineral salt to a salt free mineral can be used to supplement the trace mineral levels if necessary, but don't add salt containing selenium to a mineral already containing recommended selenium levels.

"Minerals can either contain salt or be salt free. If the mineral is salt free, adding salt to the 30 to 50 per cent level will enhance consumption of the mineral," adds Holmgren. "Adjusting the amount of salt can be used as a way to increase or decrease consumption. As a rule of thumb with most range minerals, target consumption of at least 40 grams or 1½ ounces per day. Salt is in addition to this."

Contact: *Terry Holmgren*
(403) 826-3388

Agri-News Briefs

Common Buckwheat – not a true cereal

Buckwheat was termed a *wheat* because it was used in the same way as wheat. However, it does not belong to the grass family and isn't considered a true cereal. A new factsheet on buckwheat produced by Alberta Agriculture, Food and Rural Development, was designed to help producers understand this annual. The agronomy, seeding, rotations, fertilization and harvesting of buckwheat are covered in the factsheet along with information on pest management, storing and marketing the harvested product. Producers interesting in adding buckwheat to their rotation, should ask for a copy of this factsheet, Agdex 118/20-2. Copies are available at all district offices and at the Publications Office, main floor, 7000 - 113 Street, Edmonton, AB T6H 5T6.

Veterinary Parasitology: Laboratory Procedures

A new manual for veterinarians, animal health technologists and other animal care professionals is now available. ***Veterinary Parasitology: Laboratory Procedures***, authored by Murray Kennedy, John MacKinnon and Gary Higgs and published by Alberta Agriculture, Food and Rural Development, gives guidelines for collecting and examining samples for parasites or stages of parasites, eggs, cysts, proglottids and so on. The book includes drawings that clearly illustrate how to follow the procedures. Diagnostic procedures described in the text are relevant for use in the classroom or a general veterinary practice. Because therapeutic treatment often depends on the results obtained from procedures, the book offers explanations on the limitations of the procedures and results obtained. Comments provided in the margins offer practical information and tips on the sample to be collected: number needed for sample, short-comings of the test, aid to interpreting results. Appendix I is a quick reference for collecting and examining samples when specific parasites are suspected. In addition, Appendix II provides an alphabetical listing for all the solutions used for testing and lists clear procedures for preparing them. Cost of this publication is $30 plus GST. Copies are available at all Alberta Agriculture, Food and Rural Development district offices or at Alberta Agriculture's Publications Office, 7000 - 113 Street, Edmonton, AB T6H 5T6. VISA and MasterCard orders can be placed by phone, 1-800-292-5697. Please add $2 plus GST for shipping and handling.

AWWP regional meeting

The Alberta Winter Wheat Producers Commission is holding a regional meeting on June 9, 1997 starting at 1:00 p.m. at the Lacombe Research Centre. The agenda includes an update on what the Commission has been doing and a brief discussion on the Regulatory Review currently in progress. Don Salmon of the Lacombe Research Centre, Dan Haeney with Alberta Agriculture, Food and Rural Development and Dr. Rick Butts with the Lethbridge Research Centre are three of the speakers on the agenda. This information meeting on the agronomics and marketing of winter wheat is free. For further information, contact Sharol Siewert (403) 328-0059.

Coming Agricultural Events

June 1998

Farmers' Market Workshops
June 2
9:30 a.m. - 3:00 p.m.
Provincial Building
Taber
Contact: Marian Williams
(403) 679-1210
Fax: (403) 679-1219

1998 Forage Competition and the 12th Annual Alberta Dairy Congress
June 3 - 5
Black Gold Centre
Leduc
Contact: Deb Hofstra
(403) 986-1099
Fax: (403)986-1099

CAESA Water Quality Report Information Meeting
June 3
8:00 a.m. - 4:00 p.m.
Red Deer Lodge
Red Deer
Contact: Tara Donald
(403) 674-8255
Fax: 674-8309

Agricultural Value-Added Engineering Centre (AVEC) open house
June 5
Research Centre, south of Ellerslie Road on 127 Street
Edmonton
Contact: AVEC
(403) 427-8764 or 415-2682

Stock Dog – Sheep Dog Trial – Hills of Peace
June 6 - 7
Wetaskiwin
Contact: Norm Schmuland
(403) 352-6908

Access Asia
June 7 - 8
Blackfoot Inn
Calgary
Contact: Justin Sugawara
(403) 495-4144

Lygus Bug Field Day
June 8
1:00 p.m.
George Dawson Inn
Dawson Creek, B.C.
Contact: John Huffman
(403) 538-5285

Alberta Winter Wheat Producers Commission – regional meeting
June 9
Lacombe
Contact: Sharol Siewert
(403) 328-0059

Farmers' Market Workshops
June 9
9:30 a.m. - 3:00 p.m.
Provincial Building
Grande Prairie
Contact: Marian Williams
(403) 679-1210
Fax: (403) 679-1210

Bubbles In Food – International Conference
June 9 - 11
University of Manchester Institute of Science and Technology
Manchester, U.K.
Contact: Dr. Grant Campbell
+44 161 200 4472
Fax: +44 161 200 4399

Dairy Day – open house
June 12
Dairy Research and Technology Centre
U of A – Edmonton
Contact: Sharon Katzeff
(403) 492-9565
e-mail: skatzeff @agns.ualberta.ca

Peace Regional 4-H Days
June 12 - 14
8:00 a.m. - 4:00 p.m.
Evergreen Park
Grande Prairie
Fee: $5.00
Contact: Stacy Murray
(403) 835-2241 Fax: (403) 835-3233

Drayton Valley Ag Society Presents "Livestock Show 98"
June 13
10:00 a.m. - 6:00 p.m
Omni-Plex
Drayton Valley
Contact: Ann Neumeyer
(403) 542-4034

Western Forage/Beef Group (Seminar and Field Session) Grazing School
June 15 - 17
Lacombe Research Centre
Lacombe
Contact: Grant Lastiwka
(403) 782-8028 Fax: (403) 782-6120

3rd Annual Alberta Poultry Producers' Workshop
June 16 - 18
Red Deer Lodge
Red Deer
Contact: Warren Chorney
(403) 250-1197

Western Canada Farm Progress Show
June 17 - 20
Regina Exhibition Park
Regina, Saskatchewan

Stockmen's Range Management Course
June 18
8:00 a.m. - 7:00 p.m.
Goodfare Hall
W of Hwy 2 on Sec Hwy 671
Beaverlodge
Contact: Donna Lawrence
(403) 624-6345

Stock Dog – Pincher Creek Cattle Penning
June 19
Pincher Creek
Pincher Creek
Contact: Brian Delinte
(403) 628-2290

Cowboy Poetry and Western Art – Gathering of '98
June 19 - 21
Pincher Creek
$5 general day admission, $25 evening ticket, $50 weekend pass
Contact: Pincher Creek Information Centre
(403) 627-5855

Stock Dog Clinic featuring Texan Dana McKenzie
June 19 - 21
10:00 a.m. - 5:00 p.m
Hunter Hill Stables
Sherwood Park
Contact: Gerry Quinn-Kucy
(403) 467-0199
Fax: (403) 467-3467

Japanese Gardens – Professional Development Course – Landscaping
June 19 - 20
7:00 a.m. - 4:00 p.m
Devonian Botanic Garden
Edmonton
Fee: $95
Contact: Devonian Botanic Garden
(403) 987-2064

Pacific Northwest Grain & Feed Association Annual Meeting & Conference
June 20 - 24
Sun Valley Resort
Sun Valley, Idaho
Contact: Jonathan Schlueter
Portland, Oregon
Phone: (503)227-0234
Fax: (503)227-0059

1998 Stockmen's Range Management Course
June 22 - 24
7:00 p.m. - 4:00 p.m.
Beaupre Hall
Cochrane
Fee: $100 ($160 for couples)
Contact: Brenda
(403) 381-5486 Fax: (403) 381-5792

Stockmen's Range Management Course
June 23
8:00 a.m. - 7:00 p.m
Agriplex
High Prairie
Fee: $50.00 per person and $75.00 per pair
Contact: Donna Lawrence
(403) 624-6345

Stock Dog Trial – Red Deer Highland Games
June 26 - 27 (8:30 a.m. - 4:30 p.m.)
Westerner Grounds
Red Deer
Fee: Novice-$20 Pro-Novice-$30.00 Open-$40.00 ($5 deduction for ASDA Members)
Contact: Larry Bell, RR2
Delburne, AB T0M 0V
(403) 749-2475 Fax: 403-749-2475

45th Annual Beaverlodge Beekeepers' Field Day

June 26
Beaverlodge Research Centre
Beaverlodge
Contact: Don Nelson
Phone: (403) 354-5122

Stockmen's Range Management Course

June 26
8:00 a.m. - 7:00 p.m.
Recplex
Fort Vermilion
Fee: $50.00 per person and $75.00 per pair
Contact: Donna Lawrence
(403) 624-6345

Stock Dog Trial - Wanham Sheep Dog Trial

June 26 - 27
Wanham
Contact: Al Connell
(403) 694-2503

Southern Alberta Soil & Crop Diagnostic Field School

June 27 - 2
8:00 a.m. - 4:00 p.m.
Lethbridge Research Centre
Lethbridge
Fee: $175.00/person
Contact: Dr. Ross McKenzie or
Terry Sheen
(403) 381-5126 Fax: (403) 381-5765

Rural Heritage Drivings Show

June 27
Alix Agricultural Society Grounds
Alix
Contact: Allison Magee
(403) 784-3436

Stock Dog – Cardston Remington Day, Arena Trial

June 27
Cardston
Contact: Mark Heggie
(403) 653-5139

Alberta Branch CSGA Annual Meeting

June 28 - 30
Westin Hotel
Edmonton
Contact: Bill Witbeck
CSGA Alberta Branch General Manager
(403) 782-4641 Fax: (403) 782-5514

Stock Dog – Goldenrod Sheep Dog Trial

June 28 - 29
Airdrie
Contact: Denis Nagel
(403) 946-4299

Hitting The Mark – Beef Improvement Federation – 30th Annual Meeting and Research Symposium

June 30 - July 3
Calgary
Contact: Canadian Beef Breeds Council
(403) 730-0350 Fax: (403) 275-8490

July 1998

Stock Dog – Calgary Stampede Stock Dog Shoot Out

July 3 - 4
Calgary Stampede Grounds
Calgary
Contact: MAX
(403) 261-0266

1998 Provincial Direct Seeding Day

July 7
9:30 a.m. - 4:00 p.m.
1 km west of Hwy 2 - 32 St exit
Red Deer
Contact: Michelle McKinnon
Conservation Coordinator
(403) 948-8512 Fax: (403) 948-2069

Diagnosing and Managing Disease and Insect Problems in Greenhouse Crops

July 8
9:00 a.m. - 4:00 p.m.
CDC North, 17507-Fort Road
Edmonton
Fee: $42.80 including GST
Contact: Dr. Mohyuddin Mirza
(403) 415-2303 Fax: (403) 422-6096

Direct Seeding Demonstration School

July 8
1:00 p.m. - 5:00 p.m.
8 km east of High River on Highway #23
High River
Contact: Wally Sawchuk or Terry Sheen
(403)381-5820 or 381-5126
Fax: (403) 381-5765

Stock Dog – Alberta Open Jackpot, Busby Sheep Dog Trial

July 11 - 12
Busby
Contact: Richard Tipton
(403) 584-2258

Parelli Natural Horsemanship Clinic
July 11 - 14
Olds College Arena
Olds
Fee: Primary clinic $400 & Secondary clinic $400, Auditor tickets are $100/clinic
Contact: Mary Ann and Don Marcellus
(403) 556-1PNH (556-1764)
Fax: (403) 556-3635

4-H Beef Heifer Show
July 12 - 14
Bashaw Ag Grounds
Bashaw
Contact: Henry Wiegman
(403) 422-4444

Flagstaff County 1998 Provincial Agricultural Service Board Summer Tour
July 14 - 17
Sedgewick Recreation Centre
Sedgewick
Contact: Brent Hoyland, Flagstaff County
(403) 384-3537

4-H Dairy Show
July 17 - 18
Westerner Exposition
Red Deer
Contact: Henry Wiegman
(403) 422-4444

Stock Dog - Yankee Valley dog Trial
July 18 - 19
Airdrie
Contact: Milton Scott
(403) 948-6960

NUTRACON 98: Nutraceuticals, Dietary Supplements, Functional and Medical Foods
July 20 - 22
Hyatt Regency Hill Country Resort Hotel
San Antonio, Texas

M.D. of Rocky View Annual Agricultural Tour
July 23
Calgary Area agricultural sites
Calgary
Contact: Tim Dietzler
(403) 230-1401

Strategic Partnerships to Successfully Commercialize Agricultural Biotech
July 23 - 24
The Sutton Place Hotel
Chicago, Illinois

Stock Dog - Homestead Trial, sheep dog trial
July 25 - 26
Coronation
Contact: John Forrest
(403) 575-2271

4-H Horse Classic & Project Fair
July 29 - 31
Olds College
Olds
Contact: Henry Wiegman
(403) 422-4444

International Triticale Symposium
July 26 - 31
Red Deer Lodge
Red Deer

August 1998

Stock Dog – Heritage Acres, Sheep Dog Trial
August 1 - 2
Pincher Creek
Contact: Joanne Wells
(403) 627-5588

Ninth International Wheat Genetics Symposium
August 2 - 7
University of Saskatchewan
Saskatoon, Saskatchewan
Contact: Pierre Hucl
(306) 966-8667

Unity In Diversity, Annual Holistic Management conference
August 5 - 7
Ponoka Legion
Ponoka
Contact: Cindy Hudson
(403) 372-2190

4-H Judging Competition
August 7 - 8
Olds
Contact: Henry Wiegman
(403) 422-4444

Stock Dog - Alix Ag Society, Stock Dog Trial
August 7 - 8
Alix
Contact: Sandy
(403) 747-2017

1998 Gateway Research Organization (GRO) Plot Tour
August 12
12:00 p.m. - 7:00 p.m.
Westlock Community Hall
Westlock
Contact: Gateway Research Organization
(403) 349-4546 Fax: (403) 349-5937

North America Weed Management Association Annual Conference and Tour
August 18 - 20
Idaho, U.S.
Idaho Falls, Idaho, U.S.
Contact: Marilyn Nelson
(208) 785-8066, Blackfoot, Idaho

The Versatility Challenge
August 29
Alix Agricultural Society Grounds
Alix, Alberta
Fee: $50.00
Contact: Allison Magee
(403) 784-3436

September 1998

Stock Dog – Australian Cattle Dog Specialty & Herding Trials
September 1 - 3
Quickheels Ranch & Kennels Reg'd
Savona, B.C.

October 1998

Poultry Service Industry Workshop
October 8 - 9
8:00 a.m. - 12:00 p.m.
Kananaskis Lodge
Kananaskis
Contact: Narine Singh
(403) 415-0827 Fax: (403) 427-1057

Agriculture Week
October 12 - 16
Alberta
Contact: Ron Glen
(403) 427-2137

November 1998

OPPORTUNITIES & PROFITS II – Special Crops into the 21st Century Conference
November 1 - 3,
Convention Inn
Edmonton
Contact: Wayne Goruk
(403) 427-3122
Fax: (403) 427-5921

Fall Focus 98
November 10
Camrose Regional Exhibition
Camrose, Alberta
Contact: Rosemary Snider
(403) 855-2286

Red Deer International Agri-Trade
November 12 - 15
Westerner Park, 4847A - 19th Street
Red Deer

Saskatchewan Pork Industry Symposium November 12 - 13
Saskatoon Inn
Saskatoon, Saskatchewan
Contact: Wendy Hayes
(306) 933-5078
Fax: (306) 933-7352

Model-it: Application of Modeling as an Innovative Technology in the Agri-Food Chain
November 29 - December 2
Wageningen
Wageningen, Netherlands
+31.317.49 02 85
Fax: +31.317.41 85 52
E-mail: MODEL-IT@ATO.DLO.NL

September 1999

XXXVI International Apicultural Congress
September 13 - 18, 1999
Vancouver Trade and Convention Centre
Vancouver, B.C.
Contact: Apimondia '99

Coming agricultural events notice

Do you know of any provincial (Alberta), national or international agricultural meetings, conferences or conventions coming in 1998 or 1999?

Please state the **name** of the event(s):

When is the event being held?

Where is the event being held? Include city or town; hotel or convention centre, if known:

Please give **name, city or town, and phone number** of a **contact person** for each event listed:

This form has been **completed by** what organization? Please include your phone number:

Please return this form by August 21, 1998 to:
Lee Anne Palutke, Agri-News Editor
Communications Division
J.G. O'Donoghue Building
7000 - 113 Street
Edmonton, Alberta T6H 5T6
Phone: (403) 422-6958
Fax: (403) 427-2861
E-mail: palutke@agric.gov.ab.ca

"*Coming agricultural events*" is published quarterly in Agri-News.
The next list will be September 7, 1998.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51512 7583

Agri-News

JUN 4 1998

June 8, 1998

Agricultural lease review recommendations

All Albertans are now invited to review the interim report of the Agricultural Lease Review Committee. This report, dealing with the management of public land in the White Area (Settled Area) of Alberta, has been submitted to the Ministers of Agriculture, Food and Rural Development and Environmental Protection. The Agricultural Lease Review Committee is now asking for the feedback of Albertans on the interim report.

"The recommendations came about from what Albertans told us throughout the 23 meetings we held from one end of the province to the other. In addition, we received hundreds of written submissions. The report addresses many issues that were presented to the Committee over the course of the public review period last fall," says Tom Thurber, MLA, Drayton Valley-Calmar and chairman of the Agricultural Lease Review Committee. "Now it's time to develop policy for our public lands that will take us well into the next century."

Individuals who requested a copy of the interim report will receive it in the mail. Copies are available by calling (403) 427-3595 (toll-free in Alberta by first dialing 310-0000), or downloading the report from Alberta Agriculture's Internet site. The address is:

http://www.agric.gov.ab.ca/ruraldev/publands/aglease/index.html

Comment sheets are included with the interim report and available on the web site.

"Comments from Albertans on the interim report are very important to the Committee and are key to finalizing the report," says Thurber. All comments should be received by the end of September, 1998.

The Agricultural Lease Review Committee held 23 public meetings in 20 locations during October and November of 1997. The final report on the Agricultural Lease Review will be released later this year.

Contact:	*Tom Thurber, MLA* *(403) 415-0981* *(Legislature)*	*Roger Marvin* *(403) 427-3595*

This Week

Agricultural lease review recommendations 1

Summary of key recommendations – Agricultural Lease Review Committee 2

Purple Loosestrife Eradication Program 3

Fencing made easy 4

Linking soil and water 4

Weed control in field peas – the critical step 5

Briefs 6

Summary of the key recommendations of the Agricultural Lease Review Committee

Tom Thurber, Chairman – MLA Drayton Valley – Calmar

1. **Review process**

   The Agricultural Lease Review Committee held 23 public meetings in 20 locations during October and November of 1997. Written submissions were accepted until December 31, 1997. Public feedback will be considered in formulating a final report.

2. **General philosophy**

   The interim report recommends a change in the status quo. It outlines the philosophy for a new arrangement between the Province, as the land owner, and its lease holders. The report firmly conveys the need to maintain the current public land base. It confirms that public land currently used for agriculture will continue to see agriculture as a priority.

3. **Surface compensation for industrial activities**

   Surface compensation was one of the most common concerns arising from the public review. The interim report recommends a new surface compensation arrangement between the Province and its agricultural lease holders. The report recommends that compensation for activities on public land should recognize the Province is the land owner and, as such, should collect a larger share of the surface compensation.

   Surface compensation is currently paid to the lease holder when a development occurs on the lease. These payments are made directly to the lease holders. As a result, the exact amount of compensation is not available. There are about 3,400 grazing lease holders who do not have any oil and gas activity on their lease land and about 2,300 who do.

   The Canadian Association of Petroleum Producers estimates that its members paid over $26 million in 1994 to agricultural lease holders. Government estimates suggest that 2,300 grazing lease holders receive over $15 million in total in annual rental alone. If first year payments, seismic surface compensation and compensation for access to other resources such as sand and gravel were included, the payments would likely exceed $40 million. This figure wouldn't include payments for damage to lease holders improvements such as fences.

   Surface compensation is not divided evenly as it is based on the amount of activity on the land. For example, on 26 grazing leases, over $4 million in annual oil and gas compensation is paid to the lease holders while they pay an estimated $438,000 in grazing fees and municipal taxes.

   The interim report recommends the area of an industrial development should be removed from the agricultural disposition. The Province, as the land owner, would collect all compensation and rental currently paid and would provide the agricultural disposition holder with a first year and annual reimbursement for each activity. These reimbursements would be made to cover increased management pressures created from the development. Annual compensation would be capped at the amount the disposition holder pays in yearly agricultural fees. Damage to agricultural disposition holder's improvements such as fences would be paid directly to the disposition holder by the developer. Existing developments would continue under the current arrangements until January 1, 2002. Should this proposal be adopted, all new oil and gas and other developments would be approved under the new arrangements.

   The interim report recommends that exploration for natural resources such as oil and gas should be approved by the Province without the negotiated consent of the agricultural disposition holder.

4. **Sale of public land**

   The interim report recommends the continued use and preservation of public land under government ownership. However the report recommends the orderly sale of vacant public land in the Peace River block which is not required for government programs and conservation.

5. **Recreational access to public land**

   The interim report recommends that the Province, as the land owner, should designate the lease holder as the "gate keeper" for recreational access to the land. Recreational users who wish to access leased lands must contact the lease holder. The lease holder would be able to control access and deny unreasonable access. If the recreational user felt that the "gate keeper's" denial of access was unreasonable he could ask the Province, as the land owner, to review their concerns.

6. **Liability for recreational access**

   The interim report recommends that permission slips should be provided to the lease holder to use in granting access to recreational users. The signing of permission slips would limit the liability of the lease holder.

7. **Good Stewardship**

   The interim report recommends that the lease holder's good stewardship of the lease be rewarded with increased tenure of up to 20 years.

8. **Lease Rates**

   The interim report recommends the grazing disposition holder be charged an increased fee for his grazing rental which would include municipal taxes. The Province, as the land owner, would pay the taxes directly to the municipality, currently the responsibility of the lease holder. Rental rates will be further reviewed after the changes recommended in the interim report have been implemented and a new land owner/tenant relationship has developed.

Purple Loosestrife Eradication Program

Since 1994, the Alberta Purple Loosestrife Management Committee has promoted eradication of purple loosestrife through public awareness and active control measures under the Purple Loosestrife Eradication Program.

"The Purple Loosestrife Eradication Program has been very successful in decreasing numbers of purple loosestrife throughout the province," says Shaffeek Ali, specialist with weed control and pest regulatory services, Alberta Agriculture, Food and Rural Development. "Of the 80 confirmed sites for Alberta, five of which were newly discovered in 1997, 17 sites have been devoid of purple loosestrife for the past two or more years. That brings the number of active infestations to a total of 63 sites. Several sites with high population levels were reduced significantly and the committee is very pleased to report that we can see an end in sight."

The aggressive and prolific nature of purple loosestrife make it a danger to wetlands in Alberta. There are no registered herbicides to control this weed. Once the weed gets even a small foothold in a water body, it spreads at an alarming rate choking out all other vegetation. This in turn causes wildlife and fish to leave the area.

"Purple loosestrife is a perennial weed that produces about 2.5 million seeds per plant per year," says Ali. "The seeds are spread through streams, rivers and lakes and being highly competitive, the seeds germinate quickly.

"The weed flowers from mid-July through September. This is the best time to look for purple loosestrife. It grows from one to three metres tall and has a long, vertical spike with bright pink/purple flowers. Five to six petals grow on each flower. Leaves are tongue shaped with smooth edges and are attached directly to a four sided stem. Removing the plant before it produces viable seed is important."

There are several ways for Albertans to get involved with the program and contribute to the conservation of wetland and riparian (river and stream banks) habitat:

Participate in the purple loosestrife plant exchange: even though the greenhouse industry in Alberta has voluntarily agreed not to sell Lythrum, the plant is still present in many gardens. Ornamental Lythrum cultivars were once thought to be sterile, however, research has shown that the ornamental variety can cross pollinate and produce viable seed. The plant exchange program allows homeowners to remove purple loosestrife and all ornamental Lythrum from their gardens and bring the plants to participating greenhouses for exchange and proper disposal. Dig out any purple loosestrife plants, making sure to get the entire plant including roots, and seal them carefully in a dark plastic garbage bag. Bring these to a participating greenhouse and, in return, these greenhouses have agreed to provide one free four-inch plant or an in store discount (some limits apply). Be sure to check with the greenhouse to confirm that they are a participant in the program before taking the plants in.

Participate in one of this year's *Purple Plant Pulls* volunteers are crucial to the success of eradicating wild infestations of purple loosestrife. Since infestation numbers are small in Alberta, hand pulling and digging remains the major method of control. In 1997, northern Alberta had 38 volunteers contribute 172 hours to dig out or clip purple loosestrife. Four hundred large bags of the pulled plants were hauled away. In southern Alberta from July 28 to August 31, 1997, the Bow River Project through the Community Service Program organized 241 prisoners to pick 1,584 bags of weeds including purple loosestrife.

Several Purple Plant Pulls are being organized for various locations around Alberta during the months of July and August. To get involved, simply contact the Purple Loosestrife Eradication Program coordinator at (403) 422-2240.

"The beautiful killer is under attack. There are several European beetles that may provide relief to weary volunteers trying to get a handle on the larger purple loosestrife infestations in Canada," says Ali. "Studies are being conducted on two European leaf eating beetles and one root weevil that feed exclusively on purple loosestrife. The larva, and to some extent the adults, of the beetles eat the leaves of purple loosestrife and feed on the flowering buds. Studies have shown that this feeding can prevent flowering within a three-year period. Results look promising and these beetles may be just what the wetland doctor ordered, especially in provinces such as Ontario where infestations of purple loosestrife are so high that there is no hope of controlling it by hand."

This year in Alberta, hundreds of leaf eating beetles will be released on two sites of purple loosestrife. The sites for release were chosen based on the size of the infestation and the location (near or in sensitive water bodies). It is still unknown whether the beetle populations will be able to survive Alberta winters and whether the beetles will be able to increase their numbers enough to be effective, but scientists are hopeful. A close watch will be kept on these test sites and it will be several years before the full impact of the release program is known

Color brochures are available from Alberta Agriculture, Food and Rural Development district office and from Alberta Environmental Protection's Fish and Wildlife offices throughout the province. For more information or to report a purple loosestrife infestation, contact the local municipal weed inspector.

Contact *Shaffeek Ali* *Cindy Verbeek*
(403) 422-4909 *(403) 422-2240*

Fencing made easy

Smooth wire electric fencing is probably the fastest, easiest fencing available. The evolution of new low impedance style energizers (fence chargers) make it possible to control all manner of animal from sheep to bears with much less labor than before.

"Fencing technology, as with most forms of technology, is advancing by leaps and bounds," says Trevor Yurchak, beef specialist with Alberta Agriculture, Food and Rural Development, Athabasca. "There are even 'smart' fence chargers complete with computer chips that monitor fence conditions daily and automatically make adjustments. Electric fencing can mean real time savings to producers making major pasture improvements."

Learning how to use electric fencing technology can help Alberta producers save thousands of dollars and hours of maintenance time. Some tips to keep in mind when considering electric fencing include:

- **adequate earth grounding** – poor grounding gives weak shocks. Install several ground rods, at least three that are six to eight feet long, galvanized and attached with good ground clamps. Electricity must complete a full circle back to the charger through the ground;
- **don't use different type of metals** – when steel wire is hooked up to copper, electrolysis happens and the metal becomes corroded, making a poor contact and weakening the shock power;
- **spacing of fenceposts** – 50 foot spacing on flat land is too close. The fence acts like a rubber-band. Without the proper resiliency, when an animal runs into the wire the insulators could break or posts get knocked out of the ground. When posts are spread far enough apart, 80 to 100 feet, the wire bends to the ground and pops back up;
- **wire tie-offs** – some specifications call for braces every quarter mile (1,320 feet) to tie the wire off. However, tie-offs set at 5,280 feet actually adds more elasticity in the fence wire, reducing the chance of wires breaking;
- **remove old or existing fences** – old fence wire can come in contact with the new electrified wires and this almost always causes a complete short in the fence;
- **watch the heavy, long, wet grass** – it can drain a lot of power from the fence. To help overcome this, hook-up the lower wires separate from the other wires and install a switch for the lower wire so they can be turned off when the grass is tall;
- **purchase good quality, long-lasting insulators** – sunlight deteriorates plastic. The black insulators are usually treated to resist degradation by ultraviolet light;
- **install solar panels correctly** – solar panels should be installed directly facing the sun. If not installed correctly, they will not function properly;
- **kinks will cause breaks in high-tensile wire** – don't hit this kind of wire with a hammer, always cut out a damaged section of high-tensile wire and splice it. Hand-tied square knots make the strongest splice;
- **wire spacing** – keep wires at least five inches apart;
- **a voltage meter** – takes the guessing out of the job;
- **wire size** – the larger the wire, the more electricity it will carry. For over 20 miles of hot fence, 12.5 gauge is a good choice;
- **proper fence charger** – choose the correct fence charger for the job. If a smooth wire fence doesn't have enough electricity behind it, the animal will walk right through it.

"Producers should choose a low-impedance fence charger. Purchase one from a dependable supplier and that offers a warranty and carries replaceable components," adds Yurchak. "Electric fencing can be a great time and cost saver, don't be afraid to use it. Find a good fence supplier and learn about this technology, and if it fits production needs, give it a try."

Three fencing demonstration locations, each displaying seven different fence types and end braces, are being set up at Flat Bush, Smith and Athabasca. For more information, contact Yurchak at (403) 675-2252.

Contact: *Trevor Yurchak*
(403) 675-2252

Linking soil and water

Alberta's diverse landscape of grasslands, parklands and countless wetlands make it one of the most important places in North America for breeding, staging and migrating waterfowl and other bird species. 1998 marks the 12th year of project work under the North American Waterfowl Management Plan (NAWMP).

"NAWMP is making a difference restoring and managing wetland ecosystems in Alberta and that makes a big difference in the recovery of North American waterfowl populations," says Brent Markham, chairman of the Alberta NAWMP board, and assistant director, wildlife management, Alberta Environmental Protection. "The project promotes partnerships of public and private agencies, organizations and individuals for conservation. It represents a commitment to habitat conservation, restoration and enhancement projects across provincial, national and international borders."

Preserving biological diversity in rural landscapes is the basis of environmental stewardship. NAWMP brings together the knowledge, resources and tools necessary to sustain a healthy rural landscape. NAWMP land management programs are delivered under the Alberta Prairie CARE (APC) Program. APC is working directly with landowners in dozens of Alberta communities to manage landscapes in a manner that provides benefits to both wildlife and agriculture.

Cont'd on page 5

Four biomes have been defined in Alberta and NAWMP has concentrated efforts in three of these biomes, the Peace Parkland Biome, Aspen Parkland Biome and Prairie Biome. The landscape in the Boreal Forest Biome has been impacted less and is not a major focus area for NAWMP work.

"More than 4,500 farmers and ranchers are involved in Alberta Prairie CARE," says John Hermans, head of the conservation and development branch with Alberta Agriculture, Food and Rural Development. "Some of the environmentally sustainable agriculture practices that contribute to the success of the NAWMP program include: a land-use exchange, managed grazing systems, reduced tillage, delayed haying, the use of flushing bars, conservation lease agreements and easements, and demonstrations."

An April 1996 to March 1997 progress review, ***Linking Soil & Water: Conservation for future generations***, contains Alberta Prairie CARE field reports and project highlights. From 1986 to March 1997, more than $64 million were spent in Alberta to conserve over 550,000 acres of wetlands and uplands for wildlife and sustainable agriculture benefits. In the 1996/97 fiscal year, more than $11 million was spent in the province and an additional 59,654 acres were secured. The cooperation and active participation of many Alberta farmers keeps NAWMP moving toward the goal of healthier, more resilient rural landscapes."

Funding for the NAWMP in Alberta comes from American and Canadian sources. The major financial partners are U.S. federal and state governments, Ducks Unlimited Inc., Canadian federal and provincial governments, Ducks Unlimited Canada and Wildlife Habitat Canada. Funding for the NAWMP from Alberta Environmental Protection amounts to 10 per cent of the total funds available for NAWMP in the province. Alberta's contribution is leveraged many times to provide expenditure and ecological benefits for Albertans.

For more information about the North American Waterfowl Management Plan in Alberta, information about how to get involved or for a copy of ***Linking Soil & Water***, contact Brett Calverley, NAWMP provincial coordinator, 202, 10470 - 176 Street, Edmonton, AB T5S 1L3 or phone (403) 489-2002.

Contact: John Hermans
(403) 427-3908
hermans@agric.gov.ab.ca

Brent Markham
(403) 422-9557
bmarkham@env.gov.ab.ca

Weed control in field peas – the critical step

In field peas, weed control can make or break the crop. Field peas are not competitive and need closer attention when it comes to weed control than any of the other major crops grown in Alberta.

Field preparation - it's impossible to move a seeded field now but thinking about where to put peas can give an idea of what to expect. The most important question producers should ask is - were steps taken to eradicate perennial and winter-annual weeds from the field prior to seeding? If thistle was present in a field last year and nothing was done about it, be ready for another go-round with thistle this year.

"It's important to **spray early**," says Terry Buss, pulse and special crop specialist with Alberta Agriculture, Food and Rural Development. "Spraying early is probably the most important thing I have learned about controlling weeds in field peas. Peas are very susceptible to damage from many of the broadleaf herbicides used. Because of this, low field pea herbicide concentrations or high water rates are used. This means that the most effective control of broadleaves will occur if they are sprayed when still small. When weed seedlings are no bigger than a 'Loonie' at the two to four-leaf stage, is a good rule of thumb

"For later emerging weeds that the spray application misses, remember, early emerging weeds compete well with the crop and result in yield losses. The later emerging weeds can also decrease yield, but at least there are some larger crop plants to compete with them. Peas don't compete well but they have a much better chance against small weeds than larger advanced ones. If continual flushes of weeds such as cleavers and chickweed are a concern then a herbicide with at least a season long residual may be a good choice."

Know weed types - field pea chemicals are costly so knowing which weeds are present in a field will help ensure that the right products are being used for the weeds causing problems.

The tendency is to want to use the option that kills the greatest variety of weeds. However, if a producers knows what weeds are present, it may be possible to choose cheaper alternatives This means taking the time to scout fields properly

If you have any questions or concerns about weed control in field peas, contact the Alberta Agriculture Vermilion District Office (403) 853-8101

Contact: Terry Buss
(403) 853-8240

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51534 4139

Agri-News Briefs

New milk production techniques

Alberta dairy farmers will be shown new milk production techniques at the Dairy Research and Technology Centre's Dairy Day. During the morning sessions on June 12, 1998, producers and support industry representatives have the opportunity to hear and participate in discussions on topics such as grains and forages for production, selecting barley varieties and designing milk to meet consumer demand. Concurrent workshops scheduled for the afternoon include: feeding management, health and reproductive management survival of the fittest and mining milk. Tours and demonstrations round-out the afternoon. For more information, contact Cheryl Robb, communications specialist with Alberta Milk Producers, (403) 453-5942 or 1-800-252-7530

A new factsheet for Coriander

Coriander is an annual herb that belongs to the carrot family. Once ripe, the seeds have a sweet citrus/mint/musty aroma that has been prized for centuries. The ***Coriander*** factsheet, Agdex 147/20-2, provides information on the crop's adaptation to Alberta soil types and weather; yield and uses; seeding, fertilization, harvest and storage; weed and pest management; and, marketing. Copies of this free factsheet are available at all Alberta Agriculture, Food and Rural Development district offices or at Alberta Agriculture's Publications Office, 7000 - 113 Street, Edmonton, AB T6H 5T6.

Two additional intensive livestock operations public meetings

In addition to the 16 open houses held during April and May 1998, Alberta Agriculture, Food and Rural Development is holding two more public meetings on **June 22 at the Heritage Inn, Brooks** and on **June 23 at the Picture Butte Community Centre**. Both meetings begin at 2:00 p.m. and will run until approximately 6:00 p.m. Anyone wishing a copy of the ***Discussion Paper on Regulatory Options for Livestock Operations*** can call the Policy Secretariat office at (403)422-2070. The discussion paper is also available at Alberta Agriculture district offices and through the Internet on Alberta Agriculture's webpage at:
http://www.agric.gov.ab.ca/economic/policy/ilo.html
Each copy of the discussion paper includes a mail-in questionnaire. Public input on regulatory options for livestock operations is extremely important and to ensure all Albertans have an opportunity to respond, the deadline for receiving questionnaires has been extended to the end of June 1998. All responses should be sent to: Alberta Agriculture, Food and Rural Development, Policy Secretariat, 301, 7000 - 113 Street, Edmonton, AB T6H 5T6, attention: Mike Pearson. Results from the questionnaires and open houses will be compiled into a summary document that will be brought forward to the Standing Policy Committee on Agriculture and Rural Development. For further information, contact Mike Pearson (403) 422-2331.

Agri-News

JUN 16 1998

June 15, 1998

Weed free hay

The demand for inspected and certified weed free hay is growing within Alberta and across North America. Several rural municipalities are partnering with Alberta Agriculture, Food and Rural Development to offer a volunteer weed free hay inspection and certification program in 1998.

"The spread of noxious and restricted weeds through hay is well documented," says Shaffeek Ali, weed control specialist with Alberta Agriculture, Food and Rural Development, Edmonton. "The direct and indirect costs associated with the spread of weeds has fuelled the demand for a clean hay product."

Under this pilot program, hay must be inspected on a field by field basis prior to cutting. Based on a reasonable and prudent visual inspection by qualified personnel using a standardized inspection procedure, hay found to be free of viable seed or propagules, portions of weeds that can result in new weeds being propagated, as designated in the Alberta Standard or National Parks Standard, may be certified.

"After visual inspection, a Certificate of Inspection is issued if the field meets the requirements," says Ali. "The certificate confirms that the hay has met the inspection criteria. Hay inspected and certified as weed free will bear an inspection tag."

If hay is being produced for personal use, weed free hay will prevent weeds from infesting or spreading to other fields. For producers selling their product, weed free hay may bring a premium price.

"Hay contaminated with noxious or restricted weeds can create a very costly situation on feeding sites and in fields where livestock manure is spread," says Ali. "Feeding weedy hay on native range or in riparian areas can introduce aggressive, invasive weedy plant species and productivity may be lost forever. It is very possible that National parks in the province will require that only certified weed free hay is used in the parks in the near future."

Based on the operation of the pilot program this year, a provincial-wide program may be offered in the future. There is tremendous value, monetary and environmental, in producing weed free hay. For answers to general questions about the Alberta pilot program, contact Ali at Alberta Agriculture's pest prevention and management unit (403) 422-4909.

Cont'd on page 2

This Week

Weed free hay 1

Nuffield scholars tour southern Alberta 2

Algae in dugouts and sloughs 2

Getting a new pig-barn up and running 3

Deadline extended for options for livestock regulations 4

Early May felt like summer 4

Briefs 5

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta

Hay producers in cooperating municipalities can contact the municipal agricultural fieldman for details on local weed free hay inspection and certification pilot programs. These areas include:

M.D. of Brazeau	(403) 542-7777
County of Camrose	(403) 672-4765
M.D. of Clearwater	(403) 845-4444
M.D. of Greenview	(403) 524-4445
M.D. of Rocky View	(403) 230-1401
M.D. of Yellowhead	(403) 325-3782

Contact: Shaffeek Ali
(403) 422-4909

Nuffield scholars tour southern Alberta

Since 1949, over 700 Nuffield Agricultural Scholars from Australia, Canada, France, New Zealand, Russia, the U.K. and Zimbabwe have travelled the world studying agricultural topics. Each scholar is selected as a professional member of the agricultural community and pursues excellence through the International Nuffield Farming Scholarship Scheme.

"World Nuffield Scholars conferences are held every three years," says Neil Reid, Nuffield Scholar 1976, Taber. "The conference was held in Canada in 1983 and is being held in Canada again this year, in Ontario. The post conference tour was organized primarily by Saskatchewan Scholars and is being held in western Canada."

This year's contingent of 60 overseas guests and scholars on the western tour are from Australia, New Zealand, Zimbabwe, England, Scotland, Wales and Ireland and are joined by Canadian hosts. Many of the scholars have achieved prominence in their own countries and the group probably represents the most distinguished group of international farmers to visit western Canada.

The touring group arrives in Medicine Hat on the evening of July 22. A presentation is being made to the group by Rick Martin of the Eastern Irrigation District at 9:00 p.m. There will be opportunity to meet and network with the scholars during the evening.

On July 23, they travel to Head-Smashed-In Buffalo Jump for lunch; on to Bar-U Ranch in Claresholm, owned and operated by Orrin Hart, Canadian Nuffield Scholar 1951, where they stay for a barbecue supper; and then on to Banff for the night.

For further information, contact Reid at (403) 223-1862, Doug Visser, Canadian Scholar 1995, (403) 472-6119 or Rod Bradshaw, Canadian Scholar 1994, (403) 227-1020.

Contact: Neil Reid
(403)223-1862

Algae in dugouts and sloughs

From spring to fall, algae can be a problem with pasture water supplies. Whether in dugouts, sloughs or stock tanks, getting rid of algae growth is on the minds of Alberta stock growers.

"Algae are microscopic plants that live in water," says Ken Williamson, agriculture engineering technologist with Alberta Agriculture, Food and Rural Development, Red Deer. "There are hundreds of species of algae and they seem to adapt to almost any environment from the boiling hot springs of Yellowstone to water bodies in the Arctic. Like any plant, they require sunlight and basic nutrients, such as nitrogen and phosphorous. Some algae, like stringy algae found in stock tanks, are adapted to thrive in the clean cold water environment with very low nutrient levels. Other algae, such as the blue-green algae, prefer warm stagnant water with high levels of phosphorus."

Most algae is just a nuisance. It plugs pipes and screens and looks unsightly but otherwise isn't a problem. Some forms, however, can be dangerous. Some species of blue-green algae are toxic. They form toxins that can affect the nervous system or internal organs, such as the liver. These algae are usually most dangerous after a period of warm sunny weather when growth is rapid and the algae concentrates to one end of a pond.

"If algae is toxic, an animal can die within minutes of drinking from the water," says Williamson. "The most common forms of blue-green algae look like grass clippings in the water or make the water look like pea soup."

There are several ways to deal with this potential problem:

- provide clean water for livestock
- keep an eye on surface water sources – if algae problems occur, get cattle away from the water
- treat the water early, before there is a significant amount of algae
- if water with a significant algae bloom is treated, keep livestock away for about two weeks to allow any toxins that may be there to dissipate.

"The most common treatment for algae bloom is copper sulphate, bluestone," says Williamson. "The maximum recommended dose is 1/4 to 1/2 pound per 100,000 gallons of water. Too much bluestone will kill other aquatic life such as fish and zoo plankton. Many of the zooplankton actually feed on algae and provide some natural algae control. Clearly a case of more is not better. Be careful to treat the water with the correct amount of bluestone.

"If algae in a pond are toxic, bluestone can make the toxicity problem worse. Bluestone ruptures the cell wall and causes the toxin to be released all at once. It is extremely important to keep animals away from the water in this situation.

Cont'd on page 3

An alternative treatment is to use hydrated lime to control algae. The lime treatment settles the algae to the bottom and doesn't allow the toxin to be released. The lime also precipitates most of the phosphorous in the water, effectively starving the algae for the rest of the season. The down-side of lime treatment is that it requires relatively large amounts of lime and it is best done by a custom lime applicator. A typical farm dugout will often need 500 to 1,000 pounds of lime.

Alberta Agriculture has several factsheets on algae control: ***Dugout Maintenance*** – Agdex# FS716(B31), ***Hydrated Lime for Algae Control*** – Agdex# FS716(B37) and ***Blue-Green Algae Poisoning of Cattle*** – Agdex# FS666-4. They are available free of charge from any Alberta Agriculture district office or from the publications office, 7000 - 113 Street, Edmonton, AB

Contact: Ken Williamson
(403) 340-5324

Getting a new pig-barn up and running

Some of the most important steps in getting a new barn up and running is spending time checking the construction details of the building and planning start-up pig flow and breeding programs.

"It is essential to complete the necessary post-construction checks and set up general management plans," says Marvin Salomons, pork specialist with Alberta Agriculture, Food and Rural Development in Red Deer. "It's a good idea to have all of the key people involved when equipment is being installed. They are not only good quality control agents but may have practical suggestions and ideas that can easily be incorporated at this stage."

Several things can be done to prepare the barn before animals arrive:

- prevent clogged sewer lines by removing all construction debris from the pits;
- prepare the pits by adding at least six inches of water. A bacterial starter can be added to aid future manure decomposition;
- wash or spray cement with de-toxified sulfuric acid. Untreated new cement can inhibit ideal bacterial growth in pits for up to two years;
- pressure wash floors and slats at least three times before pigs come in contact with them. This helps remove any sharp cement abrasions or chips;
- disinfect the entire barn just before pigs arrive;
- smooth all welds and sharp edges. Test surfaces by running a hand along them;
- ensure concrete floors are warmed up – especially in the winter by pre-heating rooms for at least two weeks before pigs are introduced;
- provide confinement bars or belts to lock small gilts into stalls; and,
- pre-test all heating and ventilation systems before stocking

"To make start-up easier on pigs and staff, bring in new gilts weekly for the first month and then switch to bi-weekly," says Salomons. "Have the supplier stockpile gilts for at lease a month before receiving the first batch. This allows the supplier to get enough weight and age on them."

New producers will be able to breed enough from their first batch to meet breeding targets and still leave the smallest ones to cycle and breed on their next heat. Gilts cycling but not bred should be recorded and the information transferred to a breeding prediction chart.

"Gilts should get initial vaccinations for parvo and erysipelas at least one month before delivery and a second booster one week before delivery," adds Salomons. "If they haven't received their second booster, producers should administer this on arrival. All gilts should be tagged on arrival and again when they are bred."

Decide early whether natural or artificial insemination (AI) breeding will be done. At start-up, it may be better to do less than 50 per cent AI. Boars should be stockpiled by the supplier for at least a month before delivery and always get at least 18-month old boars for ideal gilt stimulation and heat checking.

"It may be easier to use boars for the first breeding and then put gilts in stalls and AI for subsequent breedings," says Salomons. "Be sure all staff have lots of experience in AI Courses are available and trainers can be brought into a new operation and instruct staff on-site."

Once bred, move gilts into farrowing at least one week before the farrowing date. Have all farrowing equipment and medicines in place. Also, farrowing stress can be reduced by playing taped sounds of nursing and noisy pigs.

"When dealing with livestock, there can be problems such as gilts getting out of stalls, irregular cycles, repeats, abortions, off-feed, scours and so on. These upsets are all part of a livestock operation and producers must deal with them. It's good to know that there are pork specialists producers can call in all areas of the province," says Salomons.

Contact: Marvin Salomons
(403) 340-5336

Deadline extended for options for livestock regulations

People in Alberta now have more time to make their views known on how livestock operations in the province should be regulated.

"We're adding two more open houses to the schedule and extending the deadline for submissions on the *Discussion Paper*," said Mike Pearson, with Alberta Agriculture, Food and Rural Development's policy secretariat. "We understand that spring is a busy time of the year, and not just for farmers. This is an important issue, and we believe that those who still want to participate in the process will welcome the extra time."

The new open houses will be held on **June 22 in Brooks at the Heritage Inn**, and in Picture Butte on **June 23 at the Picture Butte Community Centre**. Both open houses will run from 2:00 to 6:00 p.m. Those interested in participating may drop in, obtain more information and fill out a copy of the written questionnaire that comes with the discussion paper. As well, the deadline for submissions of the questionnaire has been extended to June 30, 1998. The original deadline was June 1.

Alberta Agriculture has already held 16 open houses around the province to get public input on regulatory options for livestock operations. Approximately 400 individuals attended these open houses. All 18 open houses are intended to increase awareness of the discussion paper and encourage individuals and groups to fill out the accompanying questionnaire. Resource people from Alberta Agriculture as well as various government departments, including Environmental Protection and Municipal Affairs, will be available to answer questions about the options presented as well as the new draft ***Code of Practice for Responsible Livestock Development and Manure Management.*** Local municipal government councillors and staff in Brooks and Picture Butte are encouraged to attend the open houses.

The discussion paper was created in response to concerns expressed by municipal governments, livestock developers and private citizens regarding the current process for approval of new livestock facilities, as well as the framework for monitoring and enforcing the environmental sustainability of existing livestock operations.

Results from the questionnaires and open houses will be compiled into a summary document that will be brought forward to the Standing Policy Committee on Agriculture and Rural Development. Following that, further-defined proposals regarding livestock operations and possible regulations will be circulated for consultation later this year.

Each copy of the discussion paper includes a mail-in questionnaire to solicit as much public input as possible. Anyone wishing a copy of the discussion paper should call the policy secretariat office of Alberta Agriculture at (403) 422-2070. The discussion paper is also available on the Internet on Alberta Agriculture's website. The address is: **http://www.agric.gov.ab.ca/economic/policy/ilo.html**

Copies of the discussion paper can be picked up at Alberta Agriculture district offices. So far, approximately 8,500 copies of the discussion paper have been distributed.

Contact:	*Mike Pearson*	*Bard Haddrell*
	(403) 422-2070	*(403) 427-5312*

Early May felt like summer

All Alberta locations reported above normal monthly average temperatures for the second month in a row. The provincial average May temperature was 2.8 degrees above the 1961 to 1990 average of 10.2 degrees C. and the April provincial average temperature was 2.7 degrees above normal.

"May started with daytime temperatures reaching around thirty degrees," says Peter Dzikowski. "Temperatures returned to slightly above normal the second and third week of May. The warm weather continued to the end of the month, however some locations reported localized frost damage late in the month."

May temperatures ranged from 0.8 to 5.7 degrees C above normal. The Peace Region reported the greatest temperature departures, 3.9 to 4.7 degrees above normal. These averages are based on data recorded at 62 Environment Canada climate stations across Alberta.

"Growing degree day totals for May were ten days ahead of normal in the southern region, two to three weeks ahead in the north east, north west and central regions, and three and a half weeks ahead in the Peace region," says Dzikowski. "Growing degree day totals are used for comparing the progress of a growing season to the long-term average and are useful for estimating crop development stages and maturity dates."

The provincial average precipitation of 43.2 mm was 4.3 mm below the 1961 to 1990 average of 47.5 mm.

The southern region reported above normal precipitation. The northeast, northwest, central and Peace regions reported below normal precipitation totals. Amounts of 11.4 to 184.8 mm, or 11 to 261 per cent of normal were reported. The eastern half of the central and north east regions, and parts of the Peace region were the driest areas in May.

Cont'd on page 5

"Stavely west reported the greatest precipitation departure with 171.2 mm or 324 per cent of normal," adds Dzikowski. On the dry side, Lac La Bache reported 5.8 mm of precipitation in May, only 11 per cent of it's long term average.

"The Environment Canada temperature anomaly forecast for June, 1998 is for below normal temperatures for Alberta. Climatology indicates that summer months with below normal temperatures tend to have above normal precipitation. Above normal temperatures in May were associated with below normal precipitation in most of Alberta."

You can find more details at the Robin' The Web Internet site: **http://www.agric.gov.ab.ca/navigation/sustain/climate/index.html**

Contact: Peter Dzikowski
(403) 427-3594

Agri-News Briefs

Drought Watch – website provides essential information

Provides information on drought risks and how to tailor farming practices to unusually dry weather, Drought Watch is a new PFRA website. Up-to-date information on drought conditions in Western Canada is available on-line. PFRA is monitoring the impacts of drought on water supplies, soil degradation and agricultural production to give producers the most up-to-the-moment information possible. Features that suggest activities to reduce drought vulnerability are being built and will be included on the website. The information is easily downloadable and is presented in high resolution and color format. All information, including maps, is ready to be used as handout material for presentations or used in print or electronic new reports. Links to other websites are built in so that producers can access additional information on crop reports, climate conditions, reservoir levels, streamflow, snowpack, groundwater levels and cropping information. The website address is:

http://www.agr.ca/pfra/drought.htm

Further information is available by contacting Ted O'Brien (306)780-6000 in Regina, or one of the PFRA offices in Alberta.

Builders of Alberta Award presented to Ag Association

On May 22, the University of Alberta honored eight groups with a one-time only Builders of Alberta Award. Created as part of the U of A's 90th anniversary celebrations, the award recognizes groups that have made a significant contribution to Alberta's growth since 1908. Contributions to social, economic, educational, cultural, business, health and professional aspects of provincial growth were eligible. Since the formation of the Edmonton Agricultural Society in 1879, Ag Societies have been an integral part of community life for both rural and urban centres in Alberta. There are now 300 societies throughout Alberta that have a strong partnership with government, communities and organizations. These societies are involved in providing programs and facilities that enrich rural life and benefit Albertans of all ages. Ag Society fairs/exhibitions were the original marketing centres for Alberta products, services and resources and they continue this function today, generating over $150 million annually. For further information, contact Wendy Pruden, executive assistant for the Alberta Association of Agricultural Societies, (403) 427-2174.

1998 forage competition winners

At the 12th annual Alberta Dairy Congress, held in Leduc on June 3 to 5, 1998, this year's forage competition winners were announced. The Best Forage Sample award went to Darrell Graff of Vulcan. Other forage producers who stacked up in the competition are:

Class 1 – legume hay:

1 - Darrell Graff, Vulcan
2 - Alfred Hildebrandt, Calmar
3 - Ray Galas, Clyde
4 - Richard and Dianne Andersen, Evansburg
5 - George Beutler, Leduc

Class 2 – grass/legume hay mix:

1 - Ray Galas, Clyde
2 - Jeffrey Miller, Markville
3 - Andersons, Rimbey
4 - John and Brenda Dewitt, Millet

Class 3 – grass hay:

1 - Ed Wedman, Leduc
2 - Alfred Hildebrandt, Calmar
3 - Arthur Balkan, Edmonton
4 - George Beutler, Leduc
5 - Jack Vanderhoef, Wetaskiwin

Class 4 – haylage:

1 - Rob Scheltus, Lacombe
2 - Tom Stoker, Lacombe
3 - John and Brenda Dewitt, Millet
4 - J.E.T. Dairy Farms, Lacombe
5 - Houweling Farms, Coaldale

Class 5 – cereal silage:

1 - Joe Deunk, Leduc
2 - Andersons, Rimbey
3 - Ed Reirson, Leduc
4 - Jake Wedman, Leduc
5 - John and Brenda Dewitt, Millet

Class 6 – export hay:

1 - Gordon Reid and Sons, Cremona
2 - Wilfred Knight, Tees
3 - Jim Anderson, Rimbey
4 - George Beutler, Leduc

"The overall quality of this year's entries was average to slightly above average," says Fred Young, crop specialist, forages, with Alberta Agriculture, Food and Rural Development, Evansburg. For further information, contact Young at (403) 727-3673.

Wheat genetics symposium

The 9th International Wheat Genetics Symposium is being held at the University of Saskatchewan, Saskatoon, on August 2 to 7, 1998. This is the second time the IWGS will be held in Canada. The symposium covers all aspects of wheat genetics and breeding. The program includes invited and contributed papers and posters and a referred proceedings including papers and posters will be available at the symposium. Information is available on-line at:

http://www.usask.ca/agriculture/cropsci/winter_wheat/9th_iwgs/

For further information, contact Pierre Hucl (306) 966-8667, Doug Knott (306) 966-4953 or Carolyn Ouellet (306) 966-4944.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51534 4253

CANADIANA
JUN 22 1998

Agri-News

June 22, 1998

The changing face of rural landscape

For over 20 years, Alberta Agriculture, Food and Rural Development has been concerned over the loss of agricultural land. As a result, since 1976, the department has regularly monitored additions and deletions to the land base. Results are now available from the most recent study and you might be pleasantly surprised.

"From 1991 to 1995, Alberta did not lose any agricultural land to development. On the contrary, there was a five-year net gain of over 20,000 acres," says Mike Pearson, senior policy analyst with policy secretariat, Alberta Agriculture, Food and Rural Development. "This happened because of policy changes in the early 1990s, including the phasing out of government financing for the purchase of land. The changes led many holders of public lands leases with options to purchase to finalize the sale of the land, adding to the agricultural land base. Municipalities also continue to make responsible land-use planning decisions that protect agricultural users."

The net loss of agricultural land over two decades is 253,000 acres. When compared to the provincial agricultural land base, this represents only one-half of one-percent. It is recognized that the overall quality of our land base is changing very slightly over time. While most land additions are of lower quality, about half of the land deletions are of higher quality.

Alberta Agriculture does not believe the agricultural land base is in jeopardy, but that doesn't mean it's time to be complacent. Even more demands on the agricultural land base are expected in the future.

"In addition to public land sales no longer being encouraged, oil and gas activity is at a 20-year high," says Pearson. "Also, residential subdivisions have been increasing since the mid-1980s. As urban residential developments move into rural areas, the number of nuisance complaints may increase. This will present special challenges to the agricultural industry."

Alberta Agriculture believes it's important to continue collecting agricultural land base data. This information is a valuable tool to municipalities that will continue to make responsible planning decisions.

"There will always be changes to our landscape," adds Pearson. "Alberta Agriculture doesn't become involved in individual subdivisions or zoning changes. This power is in the hands of local governments. Municipalities can do a good job in balancing the needs for residential and industrial developments, and the need to maintain a viable productive agricultural land base."

Contact: Mike Pearson (403) 422-2070

This Week

The changing face of rural landscape 1
Why diversify? 2
Italian Ryegrass 2
FBMP seeks project applications 3
Lygus bug look-out 3
Drilling Waste Management 4
Briefs 4

Agri-News Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861
Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca
Alberta AGRICULTURE, FOOD AND

Why diversify?

Diversification of crop and livestock production is of considerable interest to Alberta producers. Staff in Alberta Agriculture, Food and Rural Development's New Crop Development Unit are constantly looking for new kinds of crops that might be adapted to commercial production.

"Through diversification, farmers strive to increase productivity and marketability of their crops and profitability of their operations," says Dr. Ron Howard, unit leader of the New Crop Development Unit, Brooks. "Before selecting an alternative crop, producers need to get the answers to some key questions. How much will it cost to produce? What is the end product and how can it be used? How strong is the market for it? What quality and consistency of supply are needed? What will the economic returns be?"

When trying out a new crop for the first time, producers should start on a small scale. Crops that require only minor farm equipment and management changes in comparison to those already being grown are often the best choice. Crops that need major changes in equipment and management will be more costly and difficult to grow. Other important factors to consider are the availability of local production information, previous experience in growing alternative crops, risk from pests and diseases, and access to knowledgeable crop specialists or certified crop advisors.

"Canola, pulses, essential oil crops, forage seed and various horticultural crops are examples of past crop diversification successes in Alberta," adds Howard. "Today, Alberta Agriculture staff are looking at alternative crops that have potential uses as exotic human foods, medicines, animal feeds, nutraceuticals, fibres, energy sources and industrial raw materials."

Diversification is expected to play an ever increasing and important role in the future growth of Alberta's agricultural industry, especially as new crops come into use or different ways are found in which to use traditional crops.

Contact: Dr. Ron Howard
(403) 362-1328

Italian Ryegrass

Cow condition and calf weight gains are often compromised in the fall because of low quantity or quality of grass. The use of winter cereals or annual ryegrass can boost calf gains and cow condition in the fall while at the same time reducing winter feed costs.

"Intercropping or seeding spring and winter cereals together can provide high quality extra fall grazing," says Patrick Ramsey, P.Ag., beef specialist – cow/calf with Alberta Agriculture, Food and Rural Development. "When fall cereal such as fall rye, winter wheat or winter triticale, is seeded in spring it remains in the vegetative state and provides excellent grazing after the spring cereal is harvested for greenfeed or silage."

Annual or Italian Ryegrass is a new idea for providing excellent quality late fall grazing. Italian Ryegrass grows best on irrigated land or in areas with 20 inches of annual rainfall. Seeded at 10-12 lbs/acre and fertilized like a normal grain crop, it produces large yields of palatable forage. Italian Ryegrass doesn't harden off for winter and keeps growing late into the fall, resulting in a nutrient quality similar to barley silage. Annual Ryegrass yields more than oats, fall rye or winter wheat in areas of adequate moisture.

"Three *Farming for the Future* (FFF) projects were conducted in the Longview and High River areas last summer to evaluate Italian Ryegrass under our growing conditions," says Ramsey. "When annual Ryegrass was seeded as a mono crop very good growth occurred. Early weaned calves were put onto the 55 acre pasture after weaning in mid September and had virtually no sickness. The 217 calves averaged 2.7 lbs/head/day over 31 days for a total of 373 lbs of beef per acre. Cows went into winter in better condition and were able to winter graze longer than with later weaning."

When Italian Ryegrass was seeded as an intercrop with oats on 27 acres, excellent growth occurred. Yearlings were used to graze off the oats and were sold at the end of July. The 64 yearlings averaged 2.9 lbs/head/day over 30 days for a total of 204 lbs of beef per acre. The regrowth was grazed with 240 early weaned calves averaging 0.7 lbs/hd/day over 37 days and produced another 247 lbs of beef per acre.

When Italian Ryegrass was seeded with barley silage on 90 acres the regrowth was not as good. However, 35 nursing calves gained 4.4 lbs/head/day over 33 days for a total of 48 lbs of beef per acre on the Italian Ryegrass, compared to 50 nursing calving which gained 3.9 lbs/head/day over 33 days for a total of 107 lbs of beef per acre on 60 acres of fall rye. The fall rye pasture was then grazed by 85 cow/calf pairs for another two weeks after the Italian Ryegrass was gone but had the advantage of being seeded on chem-fallow. Moisture may have been limiting for the Italian Ryegrass in this location as it received 12 inches of rain compared to 14 inches at the above two locations. Winter wheat or fall rye seeded with barley silage in the spring would have been more economical than Italian Ryegrass, and have the advantage of being grazed the following spring.

For more information on extending the grazing season, reducing cost of production, or Italian Ryegrass call your nearest beef or forage specialist with Alberta Agriculture.

Contact: Pat Ramsey
652-8303

FBMP seeks project applications

The Canada/Alberta Farm Business Management Program (FBMP) is calling for project applications for the 1998/99 programming year. There is no deadline for applications, so interested Albertans are urged to act quickly as funds will be allocated on a first come - first served basis.

"The application process is very straight forward," says FBMP representative, Arla Trueblood. "All that is required initially is a two-page letter of application. The proposal is reviewed by a committee. Requirements after the review are based on factors such as the funding level requested or suggestions for modification made by the review committee."

The initial letter of application requires a basic amount of information; who is applying, the target audience to be reached, the area of management, the learning activity addresses and the dollars required. Projects are reviewed monthly, so the waiting time to hear back is short. If the funding level requested is large, a more detailed proposal with a detailed budget and evaluation strategy are required next. Smaller projects need only a detailed budget.

"Private sector firms, government agencies and individual members of farmer groups are encouraged to apply," says Trueblood. "The funding application must, however, deal with some aspect of farm management. Production topics do not qualify."

FBMP will help cover the cost of speakers and hall rental for conferences, learning activities (face to face or distance delivery) and research projects. FBMP has helped support a number of local marketing clubs, made up of groups of farmers meeting regularly to hone their marketing skills.

"The Program looks at a wide variety of projects," adds Trueblood. "If a group or individual thinks their project or project idea may qualify, they should call FBMP."

FBMP can also help expand on ideas for learning events. Program representatives have the experience and the contacts needed to get in touch with specialists and event organizers.

A full information package that includes the format for submitting proposals is available by calling 310-0000 and asking for or dialing 556-4218.

Contact: *Arla Trueblood*
(403) 556-4218

Lygus bug look-out

With the year being so early and dry, crops were generally seeded a lot sooner than normal. Canola that would have just been seeded in early June was already getting ready to flower

"In keeping with earlier crops, pests are also much further advanced than normal," says Jay Byer, cereal and oilseed specialist with Alberta Agriculture, Food and Rural Development, Bonnyville. "One pest of canola that became a concern last year was lygus bugs. Lygus bugs attack canola at two stages -- when the flower buds are just forming and when the seeds in the pods are young and juicy. This year, producers began to see damage in early seeded crops as soon as bolting started."

Knowing what to look for is the first step in taking action against lygus bugs. There are two signs of early problems with lygus bugs:

- flower buds are normally a bright green before flowering. If lygus bugs have been active in budding canola, flower buds will appear whitish and do not fully develop; and
- actual bugs will be present and can be found. Lygus bugs are greenish colored shield-shaped bugs with distinctive lighter triangular areas immediately behind the head.

"There are two ways to look for lygus bugs, the first is the easiest – call a local agrologist and have them sweep the suspect field with a sweep net to assess the lygus bug problem Sweeping can be done using a 5-gallon pail, also," says Byer. "The recommended method is to sweep 180 degrees at arm's length. Get down to the crop level when sweeping. Do 10 sweeps at 10 sites in various parts of the field. Count and keep track of the numbers you find."

In the bud to early pod stage, after doing a complete assessment, if an average of 1.5 lygus bugs per sweep are found, there may be a problem. In the late pod stage, more than two bugs per sweep is a problem and it may be necessary to consider spraying.

"Producers are encouraged to contact their local Alberta Agriculture office for more information on lygus bugs or for a consultation regarding the need to spray," adds Byer.

Contact: *Jay Byer*
(403) 826-3388

Drilling Waste Management

A visual display of acceptable drilling waste disposal options is now available in a new video called ***Drilling Waste Management***.

"Drilling affects the surface of the land and the people who own or occupy it," says Jan Patterson, information specialist with public lands branch, Alberta Agriculture, Food and Rural Development, Edmonton. "Landowners and residents may find it useful to be aware of drilling waste regulations and practices. This new video was designed to show the various ways drilling waste should be disposed of."

In October 1996, three government agencies, Alberta Energy and Utilities Board, Alberta Agriculture, Food and Rural Development and Alberta Environmental Protection, published Guide 50: Drilling Waste Management. The guide regulates the proper disposal of drilling wastes. It was the result of industry, government and representatives from the Alberta public working together to develop requirements.

"The video takes the requirements set out in the guide and explains proper disposal of drilling waste from oil and gas operations in Alberta," says Patterson. "The disposal of drilling waste must be done using environmentally acceptable methods and it's important for landowners to know what these methods are and be aware of their rights in these situations."

Issues surrounding drilling waste disposal are explained in the video from the oil and gas industry's, government agencies' and landowner's points of view.

Copies of the video can be purchased for $10 plus GST through the Alberta Agriculture publications office, main floor, 7000 - 113 Street, Edmonton, AB T6H 5T6. To order by phone, call the toll free line, 1-800-292-5697. Both VISA and MasterCard are accepted. Please add $2 plus GST for shipping and handling.

Contact: *Jan Patterson*
(403) 427-4684

Agri-News Briefs

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51534 4378

Special crops field day

Quizzical about quinoa? Mulling over millet? Seeking info on St. Johnswort? Puzzled about peas? Enthralled over echinacea? Concentrating on caraway and coriander? July 30 at the Crop Diversification Centre North (CDCN) is the chance to see 150 different species being evaluated for their potential in Alberta. The field day includes a tour of the test plots of pulse crops, spice crops, culinary herbs, aromatic species, medicinal plants and other alternate crops. As well, the day features presentations and discussions concerning fibre hemp research, research on new species for the province, information on special crops currently being produced and other related CDCN programs. Registration is $10. Please confirm attendance by calling (403) 422-1789. For further information, contact Dr. Stan Blade, Alberta Agriculture, Food and Rural Development, (403) 422-1789.

Dairy Award of Distinction nominations

The Westerner Championship Dairy Showcase committee is seeking nominations for the Provincial Dairy Award of Distinction. This annual award is presented to a maximum of three Alberta Dairy farmers, business people or families who have made a major contribution to the Alberta dairy industry.

Nominations in the form of resumes or outline letters should be faxed to Westerner Park (403) 341-4699. Deadline for nominations is 12:00 noon, August 14, 1998. Winners will be announced and contacted in August. Award presentation takes place at an awards banquet during the Dairy Showcase event, October 29 to 31, 1998 at Red Deer's Westerner Park. The award program is supported by UFA and the Canadian Imperial Bank of Commerce. For further information and nomination criteria, contact Leigha Graf (403) 309-0209, Red Deer.

Medicinal & culinary herbs

There is tremendous interest in the herb market. For Alberta herb growers, it's important to know what crops to plant to be able to realize a profitable harvest in the summer, fall or possibly next year. During the afternoon of June 27, 1998 at Blooming Prairie, 10351 - 76 Avenue, Edmonton, a seminar on ***Production, Processing & Marketing of Medicinal & Culinary Herbs*** is being offered. Katie Benschop, owner of Blooming Prairie, will talk about the opportunities in the production of medicinal and culinary herbs. Topics from seed selection to marketing will be covered. Cost of the seminar is $35 per person or $60 per couple. For more information, call (403) 431-1451.

CANADIANA
JUN 29 1998

Agri-News

June 29, 1998

A balanced approach to nutrient management

Nutrient management combines livestock production, manure handling, agronomy and crop production in a way that balances the recycling of nutrients in the production of agricultural products. Maintaining such a balance minimizes the degradation of soil and lessens the impacts to air and water.

"Before getting to a balanced approach, there needs to be a change in the concept of manure disposal to one of nutrient recycling," says Neil Miller P.Ag, crop specialist, pulse and special crops with Alberta Agriculture, Food and Rural Development. "Optimum rates of manure application consistent with crop use must be determined. This will reduce the manure odor pollution, eliminate the risk of groundwater contamination from manure and the risk of manure and other natural runoff from fields. Using a balanced approach will also reduce the buildup of soil salinity."

There needs to be a matching of manure disposal and crop use. This involves different application rates for different soil and agroclimatic regions.

"Agriculture should be seen as a recycling industry, not a polluter," says Miller. "We already know that using the concept of back-flood irrigation on lowlands, and the subsequent haying of those areas, can take many pollutants (plant nutrients) out of runoff water. Determining disposal and uptake of micronutrients and macro-nutrients in soil is an essential step."

As livestock numbers increase in the province, it's important to understand the impact of agriculture on the environment. A recent study, ***Impacts of Agriculture on Water Quality in Alberta***, showed that agriculture does impact the environment. Alberta Agriculture is developing guidelines that match manure disposal to crop use, both for macro- and micronutrients.

"While it's important for agriculture to promote the recycling of nutrients, farmers and investors need to know that what they are doing in the short term is environmentally sustainable in the long term," adds Miller.

Cont'd on page 2

This Week

A balanced approach to nutrient management 1

Safer summer-time barbecues 2

Horticulture week '98 2

Feedlot survey finds new biocontrol option for cattle pests 3

1998 Provincial 4-H Beef Heifer Show 4

1998 Provincial Direct Seeding Day 4

Balanced fertility 4

Fall seeded canola and reduced tillage 5

Briefs 6

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

To accomplish balanced nutrient management there must be:

- safe storage of livestock manure to prevent the loss of plant nutrients;
- manure applied in amounts to match the plant nutrient requirements, without any running off or leaching away;
- crop analysis for feed quality;
- rations formulated to best meet the requirements of the type of livestock being fed; and,
- livestock ration feeding that minimizes waste.

"Properly balanced nutrient management can reduce both odors and the amount of manure produced," says Miller. "Recycling helps agriculture be sustainable."

Contact: *Neil Miller*
(403) 782-3310

Safer summer-time barbecues

Summer is synonymous with barbecue. And barbecue isn't barbecue without steaks, chicken, chops and big, fat, juicy hamburgers. However, with barbeque season in full swing it's important to take care when handling and cooking meat.

"While *baemorrhagic colitis* has been nicknamed hamburger disease, ground beef isn't the only culprit," says Linda St. Onge, food scientist with Alberta Agriculture, Food and Rural Development. "All undercooked beef, pork and poultry, as well as unpasteurized milk, are ideal for the growth of the *E.coli* bacteria responsible for *baemorrhagic colitis*."

"In the last few years, incidents of hamburger disease have declined, and that's a very positive sign," says St. Onge. "The disease is a gastrointestinal illness caused by *E.coli* bacteria. The bacteria produces a poison, or toxin, that damages the intestinal lining and results in *baemorrhagic colitis*. Symptoms include: severe stomach cramps, bloody diarrhea, dehydration and a mild fever, two to eight days after eating contaminated food."

Recommendations from Alberta Health on treating hamburger disease are very explicit:

- see your doctor if you experience bloody diarrhea
- do not take medication to stop the diarrhea, unless prescribed by your doctor
- drink lots of clear fluids
- in most cases, antibiotics are not useful

"Recovery from the disease is usually noticed within two weeks," adds St. Onge. "In a very small number of cases, the *E.coli* toxin results in a serious, sometimes fatal complication called Hemolytic Uremic Syndrome (HUS). This kidney failure can result in the need for dialysis and, eventually, kidney transplant. It is especially dangerous to young children, the chronically ill and the elderly."

The most effective way to combat *baemorrhagic colitis*, is to practice good, hygienic food handling and preparation.

There are a few basic food-handling precautions when cooking meat that will prevent illness:

- cook ground beef and chicken thoroughly so there is no pink in the centre and juices are clear;
- internal temperature of larger cuts of meat must be at least 140°F to kill the bacteria. The temperature can be checked with a meat thermometer;
- don't let raw or cooked meat sit at room temperature. Serve cooked meats immediately or keep hot and cook prepared hamburger patties or other meats immediately or refrigerate;
- refrigerate or freeze meats as soon as possible after buying;
- thaw frozen meats in the refrigerator or in a microwave and not at room temperature;
- wash your hands thoroughly before and after handling food and raw meats;
- wash all utensils, cutting boards and counters with hot soapy water to prevent bacteria in raw meats from contaminating other foods;
- wash all utensils or plates that have been in contact with raw meats before using again;
- use separate cutting boards for raw meats, cooked meats and other foods (or wash the cutting board thoroughly after each use); and,
- avoid unpasteurized milk.

"Summer is a great season to enjoy. Being a little more careful with food prep is not only easy to do but will result in a safer summer for Alberta families," says St. Onge.

Contact: *Linda St. Onge* *(403) 986-4793*
The Food Safety Information Hotline
1-800-892-8333

Horticulture week '98

Olds College is hosting the 34th annual Hort Week on July 19 to 24. Each year the event is attended by both amateur and professional gardeners.

"Hort week is an opportunity for everyone to enjoy themselves while learning more about horticulture," say s Edie Stelkovics, hort week coordinator. "Participants can learn new skills and brush-up on old ones. It's a chance to get up-to-date information on new industry developments. Professional designers, floral shop managers and amateur gardeners will all find something new to learn. A wide variety of information will be presented by experts in the horticulture and floriculture industries. Hort week has helped earn Olds College its industry-wide reputation for green-thumb excellence. This year's event continues that tradition."

Cont'd on page 3

Workshops, courses and mini-seminars are being offered on everything from alpine gardens to water gardening in containers. New this year is a herb growers school with subjects ranging from growing echinacea to St. Johnswort, specialty crops processing to organic certification.

Special interest courses include birch bark basketry, beekeeping to wine and beer making. Other interesting items include guest speakers Lois Hole and Jan Mathers, garden walks and the 3rd Annual Hort Week Mini-Market.

For more information, contact Stelkovics at Olds College, 1-800-661-6537 or check out the website: **http://www.oldscollege.ab.ca**

Contact: *Edie Stelkovics*
(403) 556-8254

Feedlot survey finds new biocontrol option for cattle pests

A two-year survey of feedlots across Alberta has identified a naturally occurring parasitic wasp with potential as a biological control tool against biting flies that attack cattle.

"*Trichomalopsis sarcophagae* is a tiny native wasp that kills stable flies that cost feedlot operators in the province an estimated $7 million in lost production each year," says project coordinator, Dr. Kevin Floate of the Lethbridge Research Centre. "It also attacks house flies, a nuisance pest for people living near feedlots. If further study is successful, the wasp could be commercially available as a control option to producers within five years."

The finding is the result of an extensive survey conducted through the cooperation of feedlot operators and both federal and provincial researchers. Twenty-two participating feedlots were sampled by Agriculture and Agri-Food Canada's Lethbridge and Ottawa research centres and Alberta Agriculture, Food and Rural Development.

"If proven effective for biocontrol, the wasp would give feedlot operators a much-needed control alternative," says Floate. "Flies cause discomfort and stress in cattle, resulting in production losses. The painful bites of stable flies can reduce weight gain and feed conversion efficiency in feeder cattle up to 20 per cent, while house flies are more of a nuisance to workers and nearby homeowners.

"Research shows that a more comfortable animal is a more productive animal. So pest control not only improves animal welfare, it increases returns to producers."

Biological control or *biocontrol* uses natural enemies to control a target pest without harming desirable organisms. Harmless to people and livestock, these parasitic wasps act as a natural biocontrol agent by laying eggs inside fly pupae. When the wasps hatch, they eat the developing flies.

Some species of parasitic wasps used for biocontrol in the United States have trouble overwintering in Alberta. This is not a problem for *T. sarcophagae*.

"The two major advantages of this wasp are that it is well adapted to Alberta and it produces many offspring for each fly pupa attacked. That makes it cheaper to rear than other species of wasps and potentially more effective to use over the long-term," says Floate. "Less than one per cent of fly pupae sampled were attacked by wasps of any species, but biocontrol strategies that increase the number of wasps could significantly reduce pest fly populations."

These parasites by themselves are unlikely to provide sufficient fly control. Their use is intended as part of an overall integrated pest management program that includes improved sanitation and more selective use of pesticides.

Eggs of stable flies and house flies are laid in wet bedding or hay, manure and rotting silage, he says. Sanitation can help keep fly populations down, but Alberta feedlot operators have few options for major pest problems.

"Some producers opt for chemical controls, but insecticides can be difficult to apply effectively," Floate says. "Plus, research has shown that flies eventually build up resistance to insecticides in subsequent generations, so we need to find more sustainable control options."

Further studies will evaluate the potential of the native *T. sarcophagae* as a biocontrol agent for the region. The research also may benefit dairy producers, since fly-induced stress can reduce milk production by up to seven per cent.

Feedlots sampled in the survey had a minimum one-time holding capacity of 1,000 cattle. With one exception, each feedlot was sampled in both 1996 and 1997. Feedlots were selected from grassland, parkland, and boreal forest regions of Alberta, with twelve from the grassland region where the feedlot industry is concentrated.

Samples were taken by placing freeze-killed fly pupae in the feedlots, retrieving them one week later and identifying the emergent wasps. In all, 10 species of parasitic wasp were identified. Of the parasitized pupae, 24 per cent were attacked by *T. sarcophagae*, making it the second-most prevalent species in the survey.

In related work, scientists at the Lethbridge Research Centre are investigating the potential of a non-native wasp, *Muscidifurax raptorellus*, that is available commercially for fly control. Preliminary tests suggest the wasp cannot overwinter in Alberta, but multiple releases throughout the summer may reduce fly numbers.

Contact: *Dr. Kevin Floate*
(403) 317-2242

Ron McMullin
(403) 327-4561
Fax: (403) 382-3156

1998 Provincial 4-H Beef Heifer Show

4-H Beef Club members from across the province are gearing up for the 22nd annual 4-H Provincial Beef Heifer Show in Bashaw, Alberta. The show will be held **July 12th to 14th** and will feature purebred and crossbreed cattle from seventy-seven 4-H Beef Clubs across the province.

"This year the show has increased in popularity again, with 475 animals already registered," says Henry Wiegman, provincial 4-H agriculture specialist with Alberta Agriculture, Food and Rural Development. "Three hundred 4-H members will be competing for top honours in judging, team grooming, breed classes, interbreed conformation, the herdsmanship competition, project bowl contest, showmanship and freshman classes. Across all classes and categories, the total number of entries is a staggering 2,650."

The United Farmers of Alberta, Alberta Treasury Branches, American Breeders Service - Canada, the Bashaw Agricultural Society, Alberta 4-H Programs Trust and Alberta Agriculture, Food and Rural Development are providing generous sponsorship for this event.

The Provincial 4-H Beef Heifer Show will be held at the Bashaw Agricultural Grounds, events running from 2:30 p.m. to 9 p.m. Sunday, 8:30 a.m. to 9 p.m. Monday, and 8:30 a.m. to 3 p.m. Tuesday. Spectators are encouraged to come take in the show.

Contact: *Henry Wiegman*
(403) 422-4H4H (4444)
email: henry.wiegman@agric.gov.ab.ca

1998 Provincial Direct Seeding Day

The 1998 Provincial Direct Seeding Demonstration will be held on July 7 at the Alberta Reduced Tillage Initiative's (ARTI) direct seeding site just west of Red Deer.

In early May, 10 direct seeding drills seeded at the site. The same drills will seed again on July 7. The following drills will be demonstrated on site:

- John Deere 1820 Air Hoe – Stealth paired row openers
- Flexi-Coil 5000 – Stealth paired row openers
- Flexi-Coil 5000 – 5 inch single shoot spread
- Flexi-Coil 6000 – double shoot Barton openers
- ConservaPak
- Concord 2812 – Farmland SB4
- Morris Maxim – Gumbo boot paired row
- Bourgault 5710 4 inch spread with midrow banders
- Ezee-On 7550 – 4 inch shovel with Farmland SB1
- Harmon 3680 – Eagle Beak openers

"The 80 acre site is a must see for producers," says Peter Gamache, program manager,

Alberta Reduced Tillage Initiative. "It features not only the direct seeding drills but numerous direct seeded plots. Barley, wheat, canola, peas, forages and fall seeded canola are seeded in the plots. Producers will be able to see some of the do's and don'ts of direct seeding related to residue management, fertilizer placement and seeding depth."

Weed control plots will include Roundup Ready canola, surface applied, non-incorporated granular herbicides, harvest staging trials, Lontrel/Roundup in canola, and new weed chemistry. Other plots include seed treatments, seeding depths and timing of weed removal and direct seeding into forages. Monsanto, Dow AgroSciences, Westco, Agrium and Agriculture Canada have extensive plots at the site.

The Red Deer direct seeding site is located one kilometer west of the intersection of Highway 2 and 32 Street on the west side of Red Deer. The site is open throughout the growing season for self-guided tours. For more information on the site and the equipment field day call 1-800-251-6846.

Contact: *Peter Gamache*
(403) 427-3361

Balanced fertility

Balanced fertility is a key factor in producing any crop successfully. For canola, the weak link is often a shortage of sulphur.

"Nitrogen is recognized as an important component in building proteins, but sulphur is also needed," says Ron Hockridge, crop specialist, cereals and oilseeds, with Alberta Agriculture, Food and Rural Development. "A ratio of 10 or 12 pounds nitrogen to one pound of sulphur may be appropriate for cereals but canola needs a ratio more in the range of eight to one."

There are several reasons for sulphur to end up in short supply. The first is uneven distribution across the field. Vast differences occur naturally from site to site in many fields. If you use our normal soil testing method of forming a composite sample from many cores, the results can fool you. High tests from one or two cores make it appear that levels are adequate across the whole field while, in fact, much of the field may be deficient.

"Sulphur availability is another key issue," says Hockridge. "Normally, plants use this nutrient in the organic form. Elementary sulphur has to be converted by soil micro-organisms before it can be used. The rate of conversion depends on many factors including size of particles, moisture, temperature and others."

Cont'd on page 5

Farmers naturally want to apply the elemental form because it is cheaper. A good strategy is to apply elemental sulphur the year before seeding canola so it will be available when the crop needs it. That isn't the only approach though

"It helps to recognize the symptoms of extreme sulphur deficiency," adds Hockridge. "Cupped leaves that are purple on the back usually indicate a problem. Plants are often spindly and the situation occurs in patches in the field. Even yellowing of some leaves could be an indication of a less severe deficiency. If in doubt, take soil and tissue samples from the areas that appear to be affected and have them analysed."

Sulphur is a mobile element, so you can correct the problem after the crop is growing. Reversing earlier damage may not be possible, but farmers who have applied ammonium sulphate at the bolting stage have seen remarkable effects on the final yield. Check strips in theses fields have shown that the most limiting nutrient does indeed determine the yield.

Contact: *Ron Hockridge*
(403)361-1240

Fall seeded canola and reduced tillage

Dormant seeding canola in the fall for early spring germination is a practice that is attracting more and more interest. Fall seeding allows the possibility of reducing the spring workload and moves up the maturity date of the canola crop.

"Fall seeding eliminates spring tillage operations and that helps conserve moisture for the crop," says John Zylstra, conservation coordinator, Alberta Agriculture, Food and Rural Development, Fairview. "In areas where growing Rapa(polish) varieties of canola is common, dormant fall seeding allows the possibility of growing higher yielding Napus (argentine) varieties."

Herbicide tolerant varieties of canola are often used for dormant fall seeding since they allow a different and usually more effective approach to weed control. However, this spring, several fields of herbicide tolerant canola have experienced either reduced vigor or a proportion of dying plants after spraying for weeds. Several reasons could exist for these problems

"One reason is inadequate cleaning of a sprayer tank which means some residue of a herbicide is causing less than expected growth and vigor in canola," says Zylstra. "The second possibility is that volunteer canola of a different variety in the field is dying from the herbicide and giving the appearance of a *suffering* field. In this situation, some plants will be dying and others will be perfectly healthy. The third possibility is that the variety is not as tolerant to drought conditions when it is sprayed with herbicide."

Producers that have this situation occurring in a field are encouraged to contact the local agrologist to help discover the reason.

Contact: *John Zylstra*
(403) 835-2291

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51534 3784

Agri-News Briefs

Landscaping with woody plants in Alberta

Using woody plants (trees, shrubs and bushes) for landscaping can be a little intimidating. Knowing how tall a tree will get or how much spread to allow for a shrub can make the decision making process easier. Since 1993, the Regional Woody Plant Test Project (RWPTP) has evaluated new woody plant species and cultivars in Alberta. The project is a cooperative trial among Alberta Agriculture, Food and Rural Development's Crop Diversification Centres (CDC) North and South, the Landscape Alberta Nursery Trades Association Growers Group and Research Committee and five current and three past nursery cooperators. For the project, plants are monitored for landscape quality and hardiness for six years. After this evaluation period, recommendations are made for each plant for the various Alberta climatic regions. Before purchasing trees or other woody plants, check the RWPTP section on the Alberta Agriculture Internet site:
http://www.agric.gov.ab.ca/crops/trees/rwptp/main.html
From ash, birch, burning bush, chokecherry and crabapple to dogwood, elder, hydrangea, larch, Russian olive, walnut and willow, over 50 species of trees and shrubs are included in the information on-line. The site features photos of most of the woody plant species that have been tested. For more information, contact Shelley Barkley, CDCS, (403) 362-1305.

Water facts

Water...it comes out of the tap or from the well, it runs in the rivers and sloshes around in abundance in Alberta lakes, and, for the most part, it's taken for granted. The following are a few little known water facts:

- the average Canadian uses 286 litres (63 gallons) of water per day, compared to 200 litres (44 gallons) of water used per day by people in Sweden and Great Britain and 150 litres (33 gallons) of water used per day by people in France;
- metered municipal water systems use about 20 per cent less water than unmetered services;
- a running tap flows at a rate of 4.5 gallons per minute; and,
- a tap that drips one drip per second can waste up to 2,000 gallons of water per year.

Agri-News

JUL 16 1998

July 6, 1998

State-of-the-art cereal research centre opens in Lacombe

Farmers are the big winners with a new cereal research centre that was officially opened at the Field Crop Development Centre in Lacombe on June 23, 1998.

"The ***James H. Helm Cereal Research Centre*** will benefit farmers in several different ways," said Ed Stelmach, Minister of Alberta Agriculture, Food and Rural Development. "The facility makes use of new genetic technologies, reducing the length of time it takes to develop different cereal varieties. Right now it can take 10 to 15 years to develop a new variety with conventional plant breeding. These technologies can cut this time by two-thirds, getting the new genetics to farmers much more quickly."

Minister of Alberta Public Works, Supply and Services, Stan Woloshyn, presented the official opening plaque to Dr. Helm. The Chairman of the Alberta Barley Commission, Brian Kriz, also attended.

"I appreciate all the support we've received over the years from producers, especially the barley producers," said Dr. Jim Helm. "We're looking forward to being able to continue our efforts to improve and develop new cereal varieties for Alberta."

The Helm Centre was built at a cost of about $1.6 million, under a unique cost-sharing agreement between the Alberta Barley Commission (ABC), Alberta Agriculture and Public Works, Supply and Services. The ABC committed funds, up to $500,000, with the Government of Alberta investing approximately $1.1 million. Farmers also provide funding to support the research that will be carried out in the facility.

This state-of-the-art facility uses modern technology to simulate ideal growing conditions for barley. The building will house four large growth rooms, two of which are already complete. Each room is like having a little outdoor field.

Special artificial lighting simulates the high level of light in the red spectrum during sunrise – light that is important to trigger pollination and contributes to stronger, more healthy plants

Cont'd on page 2

This Week

State-of-the-art cereal research centre opens in Lacombe 1

Food safety line calls hit 7000 2

Spider mite season 2

Tree seedlings for reforestation 3

Reaping Alberta-grown rewards 3

4-H members prepare for summer leadership at LTCS '98 4

Distemper in coyotes and wolves 4

1998 Provincial 4-H Dairy Show 4

Influential food trends for 1998 5

Briefs 6

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND

There are also planting cabinets, for disease research, that can produce pathogens to test cereal varieties for disease resistance. These precision cabinets can simulate winter growing conditions to minus 20 degrees Celsius – essential to break the dormancy of the seed.

The effect of this technology will be to literally custom-make the type of barley seed that a particular customer may require, whether it's a shorter-straw barley or hulless barley, with better disease resistance, a shorter growing season, higher protein content or a combination of these traits.

As well, the research carried out at the Centre could ultimately result in lower input costs for farmers and possibly even lower costs for consumers. The quality of the seed developed at the Helm Centre will further enhance Alberta's competitive advantage in research and development.

"Plant breeding is, and will be even more so in the future, a highly technical and sophisticated science," said Mr. Kriz. "We expect that the life span of new varieties will be increasingly short and production will be targeted to meet the specific needs of diverse end-users. Reducing the length of time it takes to introduce new varieties will be critical in advancing the grain industry in this province."

Mr. Kriz added that the money invested by the Alberta Barley Commission and the Government of Alberta will provide benefits to farmers for many years. "We are proud to be part of this development and are happy to see it finally come to fruition," he said.

It is estimated that research over the last 20 years at the Lacombe Field Crop Development Centre has yielded economic returns to the Alberta economy of greater than $100 for every dollar invested.

Contact: *Ron Glen*
(403) 427-2137
Clifton Foste
(403) 291-9111
Dr. James Helm
(403) 782-4641
Jan Berkowski
(403) 422-0326

Food safety line calls hit 7000

During its three years of operation, the Alberta Home Economics Association (AHEA) Food Safety Info Line has responded to more than 7,000 consumer questions and concerns about food safety.

"The volume of calls continues to increase as does the complexity of the questions," says coordinator Debbie Brekke. "Call content is logged onto a data base. Just over 15 per cent are related to processed foods with shelf life and storage being the greatest concerns."

Almost 14 per cent of total calls are related to vegetables. Close to half of these were questions dealing with canning, preserving and freezing. The third largest category of questions dealt with poultry and the storage and safe approved methods of handling poultry products.

"In addition to answering the hotline, the Food Safety Info Line staff have undertaken a major role in consumer food safety education," says Brekke. "A number of educational resources have been developed for distribution to consumers and there is an ongoing media campaign to build awareness of the service the info line provides."

The Food Safety Info Line, launched by the AHEA in June 1995, provides Albertans with direct access to accurate food safety information through a toll free line, the media and Internet. The info line was recently granted non-profit society status. The first annual meeting of the AHEA Food Safety Info Society was held in Calgary on May 30, 1998.

"AHEA designed the info line program to answer questions and concerns about the food supply from the farm to the table including agricultural practices, regulatory controls, food production and processing, residues in food, packaging, labeling, shelf life, consumer food handling and storage," adds Brekke.

Food Safety Info Line food safety specialists are located in Calgary and Edmonton. The line is answered Monday through Friday from 10:00 a.m. to noon and 1:00 p.m to 4:00 p.m. During non-business hours, messages can be left on the answering service.

Contact: *Debbie Brekke*
(403) 287-0098 or 1-800-892-8333

Spider mite season

Hot dry conditions are ideal for spider mite development. Spider mites were first observed in high numbers around Brooks in 1997. They are a concern in alfalfa seed production.

"The mites are barely visible because they are only 0.4 mm long," says Gordon Frank, crop specialist with Alberta Agriculture, Food and Rural Development, Brooks. "Spider mites usually occur on the underside of leaves. Lightly infested leaves will have a stippled appearance and heavily infested leaves turn completely yellow and dry up. Spider mites infestation can cause entire plants to die."

Early detection helps reduce damage so it's important to look for the mites now.

"Spider mites suck juice out of the plant," adds Frank. "Leaves turn yellow and dry up completely. Mites are a concern because, once established they seem to persist in an area."

Cont'd on page 3

Control will only be necessary in hot dry years. Products specifically formulated for mites are registered in other areas At present, Alberta must rely on general insecticides to suppress mite populations. Cygon has shown some control but is also highly toxic to bees in the field. If planning to use this product, please give advance notice to all beekeepers in the area.

Contact: Gordon Frank
(403) 362-1212

Tree seedlings for reforestation

Alberta greenhouse crops industry is known for vegetables, flowers and bedding plants. Total acreage under cover is approximately 200 acres. But the greenhouse industry doesn't stop there.

"Tree seedlings for reforestation have been grown in Alberta greenhouses for the past 10 years," says Dr. Mohyuddin Mirza, greenhouse crops specialist at Crop Diversification Centre North, Alberta Agriculture, Food and Rural Development. "At a recent meeting of the Alberta Forest Nursery Association held in Medicine Hat, it was reported that close to 100 million seedlings are being grown in greenhouses for reforestation projects in Alberta. There is also a possible need for the industry to grow another 10 to 15 million seedlings in the 1999-2000 season due to the forest fires in the province May, 1998."

Growing tree seedlings to specific target specifications is a challenge under dry Alberta conditions. Seedlings are grown either for July-August delivery for direct planting or for freezer storage for planting in the next season. Both cropping schedules require different management practices to set buds on the seedlings and make them hardy for planting.

"Seedlings for winter storage are seeded in March and they set buds under natural day light conditions. They are harvested in late November for freezer storage," says Mirza. "Seedlings for July-August delivery are seeded in January and hardening is done in late May or early June when there is plenty of light. To slow down the growth at that time requires the use of black out curtains, cooler night temperature, controlled watering and a careful use of nitrogen."

Reforestation companies have specific requirements and want spruce seedlings to be dark blue, shiny and waxed and have a good bud set on them. This type of healthy seedling has the best chance of surviving in the forest climate and competing effectively with other plants.

Contact: Mohyuddin Mirza
(403) 415-2303

Reaping Alberta-grown rewards

The thought of sowing seed, weeding, watering and watching small plants grow and produce fruits and vegetables sounds like heaven to some. However, some Albertans would rather spend a Saturday afternoon picking out produce at the closest Farmers' Market or Market Garden than toiling in their own garden.

"Market gardeners can be found across the entire province Many producers sell at the farm gate, either pick-your-own or pre-picked at their farm market," says Lloyd Hausher, fruit crops specialist at Alberta Agriculture, Food and Rural Development's Crop Diversification Centre – South . "Many fresh produce marketers also attend the numerous farmers' markets in Alberta. The value of fresh, locally grown, quality produce demanded by health conscious consumers has spurred expansion of this industry."

Over 30 types of vegetables and five types of fruit are on the market at one time of the year or another. Many producers specialize in one or more crops and grow only certain vegetables and fruit, others provide a veritable smorgasbord of Alberta grown produce.

"At farmers' markets and market gardens throughout the province, locally grown strawberries, broccoli, cauliflower, lettuce, green onions, peas, radishes and rhubarb can be found at varying times of the summer," adds Hausher. "Crops such as saskatoons, raspberries, beans, beets, cabbage, carrots and summer squash will be coming into their prime shortly."

Many Alberta farms produce strawberries, and many of these are the Junebearing type that are ready now. Later strawberries (day-neutrals) produce most of their crop in the fall, usually producing the heaviest in August and September.

The Alberta Market Gardeners Association distributes an updated brochure of growers each year, listing the producers' farm, directions to the farm, phone number, the type of produce grown and sales method of each operation. This year, 122 grower-members are listed in the ***Come to Our Farm*** brochure.

The ***1998 Alberta Farmers' Markets Guide*** lists 100 farmers' markets in operation in the province. Days and hours of operation, addresses and phone numbers and a location map are included in the brochure.

Copies of *Come to Our Farm* and the *1998 Alberta Farmers Markets Guide* are available at the Alberta Agriculture publications office, 7000 - 113 Street, Edmonton, AB T6H 5T6 *Come to Our Farm* is also available by calling the Alberta Market Gardeners Association at 1-800-661-AMGA (2642).

Contact: Lloyd Hausher
(403) 362-1309

4-H members prepare for summer leadership at LTCS '98

An enthusiastic group of 4-H Members gathered at the Alberta 4-H Centre in Battle Lake, June 29 to July 3, to participate in the ***1998 Provincial 4-H Leadership Through Counselling Seminar*** (LTCS). This year the program was full, training more than 90 future counsellors in effective leadership and facilitation.

"4-H members participate in educational sessions on leadership, self-esteem, problem solving, group skills, program planning, first aid and understanding youth. They also take responsibility for planning fun activities at the program," says Marguerite Stark, provincial 4-H programs specialist with Alberta Agriculture, Food and Rural Development. "This gives the delegates foundational knowledge and practical experience in leadership and facilitating." Many of the 4-H'ers in attendance were commissioned to be part of counselling teams at regional 4-H junior summer camps this July and August.

One of the highlights of the program was the *LTCS Experience*, a series of group challenges to improve the strength of the counselling teams. Delegates also took part in mini-Olympics, a carnival, dance and formal banquet.

The Wetaskiwin Federated Co-op and the Alberta 4-H Programs Trust provide sponsorship for this valuable program. With this continuing support, LTCS has grown more popular each year.

For more information, visit the Alberta Agriculture, Food and Rural Development web site at:
http://www.agric.gov.ab.ca/4h

Contact: *Marguerite Stark*
(403) 948-8510

Distemper in coyotes and wolves

Canine distemper was diagnosed in eight wild coyotes and one wolf in the Calgary area during the January to mid-April 1998 time period. Animals were found dead or were shot by police or wildlife officers.

"Clinical signs observed in the animals were similar and consisted of fearlessness, possible blindness and complacency," says Dr. Mejid Ayroud DVM with the Airdrie Animal Health Laboratory, Alberta Agriculture, Food and Rural Development. "Aggression did not seem to be a clinical feature of any animal submitted."

The coyotes examined were of mixed sex. The wolf was an adult female in good body condition. Three juvenile coyotes and one adult were in poor shape with depletion of body fat stores, and three adults and one juvenile were in good body condition.

"The proximity of this outbreak to a large urban centre, and the resulting citizen observation and cooperation, provided veterinarians with a unique opportunity to document a disease affecting wild carnivores and to rule out rabies as a possible diagnosis by detection early in the course of the disease," adds Ayroud. "The outbreak of distemper occurred during the breeding season of coyotes and may have spread by the increasing tendency of coyotes to roam along with the higher occurrences of physical contact during that time of year."

Sitings of wild animals displaying uncharacteristic behaviour or other signs of disease should be reported immediately to the closest Alberta Animal Health Laboratory or to the local Environmental Protection, Fish and Wildlife office.

Contact: *Dr. Mejid Ayroud*
(403) 948-8575

1998 Provincial 4-H Dairy Show

The 52nd annual 4-H Provincial Dairy Show is being held **Wednesday, July 15th and Thursday, July 16th** in Red Deer at the Westerner Grounds. This year's event is made possible by support from two major sponsors, the Dairy Industry and the Red Deer Westerner Exposition Association. In total, more than 40 organizations and individuals provide support for the Dairy Show.

"All 4-H dairy members are welcome to compete in project skill classes such as the dairy *Skillathon*, clipping competition, judging contest and dairy showmanship. Also, each club can enter three animals per age category in the conformation classes," says Henry Wiegman, provincial 4-H agriculture specialist with Alberta Agriculture, Food and Rural Development. "We're expecting to have between 60 and 70 participants involved in the show, or 50 per cent of Alberta Dairy Club members."

The annual Dairy Show is an excellent opportunity for members to gain show experience at a provincial level, as well as knowledge and skills about the dairy industry. Spectators are more than welcome. Classes will be held on July 15 from 9:00 a.m. to 7:00 p.m. and on July 16 from 9:00 a.m. to 4:30 p.m. at the Red Deer Westerner Grounds.

Contact: *Henry Wiegman*
(403) 422-4H4H (4444)
email: henry.wiegman@agric.gov.ab.ca

Influential food trends for 1998

Business plans, especially in industries such as agriculture and agri-food, should be based on the most current, relevant information.

"Keeping up-to-date on the latest consumer trends can make a huge difference to producers in the intensely competitive food industry," says Janice McGregor, rural development specialist - business, with Alberta Agriculture, Food and Rural Development, Morinville.

Some of the trends Alberta agri-food processors and businesses should be aware of include:

- **fruit popularity is rising** – especially wildberries, tangerine, lime and flavor blends
- **the 'In' desserts** – dessert samplers; rustic sweets; such as free-form tarts; hot and cold pairings (sorbets and ice creams with warm cake); flavored custard; upscale ice cream sandwiches; nostalgic desserts (doughnuts, s'mores and homemade cotton candy)
- **preparation method** – high-textured 'packaging' (phyllo-wrapping, spice-crusting, panko breading, crisp potato enrobing), 'flavor-rubbed' meats
- **the breads that make the meals** – breadbaskets, flavored tortilla wrappers, portable bread cones, ethnic variety breads
- **convenience foods** – ethnic soups to go; wraps; smoothies; filled bread cones
- **red-hot cuisines** – Greek Turkish, Moroccan, Persian, equatorial Asian (Indonesian, Thai, Vietnamese), Cuban, Brazilian, Med-Rim Fusion and Classic Diner (chili, pot roast, mac 'n'cheese)
- **vegetables in the spotlight** – beets, butternut squash pumpkin, wild greens, Yukon gold potatoes, black beans wild mushrooms
- **restaurant themes on the rise** – Mid-East bazaar Brazilian steakhouse, Sicilian grotto, dinner and dancing, global markets

A few of the current 'hot' product descriptors include: fresh, organic, roasted, home-made and 'crusted'. When designing packaging or advertising, working in a few trendy descriptors can make a real difference in consumer's initial reaction

"Whether the business is a restaurant, farmers' market, market garden, agri-food processor or farm-gate operation, knowing the prevalent trends can help producers make decisions on what to grow, what to produce and how to package and advertise a product," adds McGregor. "Alberta products are in demand throughout the world market. It's important to keep them in the lime-light and on the leading-edge."

Contact   Janice McGregor
(403) 939-4351

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51534 3909

Agri-News Briefs

Elk Expo

Alberta's elk industry is experiencing considerable growth. The Alberta Elk Association (AEA) now lists 375 members, more than triple from four years ago. The industry is gearing up for the 11th Annual Elk Expo, slated for July 8 and 9, 1998 at the Red Deer Westerner Exhibition Grounds. The two-day event includes a show of elk antler velvet and live animals featured in an elk show and a select auction sale. Organizers expect about 30 head to be entered in the sale. The Expo features educational seminars on elk health, management and marketing. An extensive trade fair of elk products and services is also offered during the Elk Expo. For further sale information, contact Brian Burrington (403) 845-6207, Rocky Mtn. House; for trade show information, contact Sheldon Foss (403) 556-6551, Olds; for Expo and banquet information, contact the AEA (403) 388-3324.

Ins and Outs of Saskatoon Production

Saskatoon production is a growing industry in Alberta. Many successful commercial and U-Pick operations owe their success to good planning and knowledge of this interesting and versatile fruit. For producers looking to improve their Saskatoon crop, or for those just getting started in the business, a new video shows what to look for, what to avoid, and what steps can be taken to ensure a profitable Saskatoon harvest. The 18-minute-long video, ***Ins and Outs of Saskatoon Production*** (#188 VT) is available at the Publications Office, Alberta Agriculture, Food and Rural Development. The video can be purchased for $25 plus GST. It is also available for loan from all Alberta Agriculture district offices.

CANADIANA
JUL [illegible] 1998

July 13, 1998

Safer summer sun

When it comes to sun protection the best advice is wear protective clothing and augment that with a hat and some sunscreen.

"Wearing protective clothing, long sleeved shirts and hats, is always recommended when people are working out in the sun or are exposed to sun," says Eric Jones, farm safety representative with Alberta Agriculture, Food and Rural Development. "Slip, slap and slop are words to work by – slip on some clothing, slap on a hat and slop on some sunscreen of at least a sun protection factor of 15 (SPF 15). These are a few things you can do to minimize sun damage to your skin."

Sun damage to skin is cumulative. Any change in skin colour, tanning and burning, indicates that your skin has been damaged by exposure to UVB and UVA rays from the sun.

"It is estimated that in Canada this year 64,000 new cases of non-melanoma skin cancer will be reported. In Alberta this year, it is estimated that there will be 160 new cases of malignant melanoma in men and 140 new cases of malignant melanoma in women," adds Jones. "About 80 per cent of a person's lifetime exposure to the sun's harmful UV rays occurs before age 18, so children are especially in need of protection from the sun."

A wide range of fabrics have been tested for their ability to block UVR and have SPF ratings. University of Alberta research shows that some polyester in fabric provides slightly more protection than 100 per cent cotton; tightly woven fabrics increase protection; darker colored fabrics absorb more UVR and are more protective; heavier fabrics provide higher SPF ratings; several layers of lightweight fabric increase protection; and dry fabrics are generally one third more protective than wet fabrics.

Cont'd on page 2

This Week

Safer summer sun 1
Bedding plant industry review 2
Advance forage insurance payments for dry areas 2
Advance forage insurance payments – Background information 3
Growing strong with the Alberta greenhouse industry 3
Late June rain helps farmers 4
Time to think about Christmas Poinsettias 4
Alberta 4-H representative attend Youth Leadership seminar 4
4th Annual Provincial 4-H Horse Classic 5
Grain, livestock and soil 5
Briefs 6

Agri-*News* Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861
Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

"Alberta's farmers and ranchers should take note of Environment Canada's daily UV index and, because they are more likely to be outside during the peak hours of 11 a.m. and 4 p.m., dress accordingly. The UV index is often mentioned on local radio stations as part of their weather forecast," says Jones. "When the UV index is high (7-9), as often experienced in July and August, a wide brimmed hat, long sleeved tightly woven shirt, pants and a generous application of sunscreen are definitely called for to prevent skin damage."

Skin cancer can be prevented. Just remember to ***Slip*** on the right clothing, ***Slap*** on a wide brimmed hat and ***Slop*** on an SPF 15 sunscreen.

Additional information can be obtained from the Farm Safety Program of Alberta Agriculture, Food and Rural Development, your local pharmacist, the Canadian Dermatology Association or the National Call Centre for the Canadian Cancer Society at 1-888-939-3333.

Contact: *Eric Jones*
(403) 427-4231

Bedding plant industry review

Bedding plants season has almost come to a close according to Dr. Mohyuddin Mirza, greenhouse crops specialist at the Crop Diversification Centre North, Edmonton. Most of the growers contacted described the season as successful with steady sales from April to June.

"Spring was about two weeks early this year and all the plants in gardens are flowering early as well," says Mirza. "The bedding plants industry is constantly changing with new plant material being introduced from Europe. During the 1998 season, hanging baskets using plants like Bacopa were very popular items. Many growers could not keep up with the demand.

An exciting plant for future is going to be Petunia with its new varieties like New Wave and Purple Wave. In BC, these varieties are being used for landscaping because of their trailing habits and dark colors. It can be used in hanging baskets, window boxes and landscapes. These plants do require fertilizer on a regular basis while planted in a garden.

"This year in Alberta, most growers were sold out of new geranium varieties like snow fire very early," says Mirza. "Consumers seemed to really like its white and pink color combination. New varieties keep the bedding plant industry vibrant and dynamic. Stopping by the local greenhouse and nursery is often an adventure in finding out what's new."

Contact: *Mohyuddin Mirza*
(403) 415-2303

Advance forage insurance payments for dry areas

In response to the continuing dry conditions developing in parts of Alberta, Ed Stelmach, Minister of Agriculture, Food and Rural Development instructed the Agriculture Financial Services Corporation to begin the process of advancing payments on hay and pasture acres insured for 1998. This marks the first time that such a payment has been made under the hay and pasture component of crop insurance.

"Nobody has to tell producers how dry it is out there," says Stelmach. "Some farmers are having to truck in hay from other parts of the province, or they're having to truck out their cattle to graze elsewhere in Alberta. We're estimating that approximately 1,000 producers in the dry areas, with forage insurance, will receive $4 to 5 million in advance funding."

Once the crop year is over, insurance adjusters will assess the total amount of farmers' losses and pay out the balance, depending on how much coverage producers purchased. Right now, forage crop conditions are estimated to yield less than 50 per cent of what's considered normal in areas where there has been no significant amount of rainfall in the past 12 months.

Alberta's farm safety net package, which includes Crop Insurance, FIDP, Disaster Assistance Loans along with the NISA program, has consistently dealt with similar weather-related losses.

Producers who chose not to take out forage insurance may be eligible under the Farm Income Disaster Program (FIDP) for income losses due to lack of rain for the 1998 tax year. FIDP triggers a payment when a farmer's net income in a single year drops more than 30 per cent from the previous three-year average.

Stelmach also requested a review of affected municipalities to determine their eligibility for a tax deferral of drought induced sales of breeding stock. If so, he will make this recommendation to the federal government.

"I encourage producers who are facing hay and pasture losses due to dry conditions to get in touch with their local AFSC office to get more information on the 1998 advance on forage insurance," adds Stelmach.

Applications will be available in the first part of July.

Contact: *Ron Glen* *Merle Jacobson*
(403) 427-2137 *(403) 782-8229*

Advance forage insurance payments – Background information

Severe drought conditions over the past year have adversely affected cattle producers, particularly in the Peace River block and eastern Alberta. Hay and pasture growth has been slow and well below average. As a result, many cattle producers are having to buy feed for cattle, pasture their 1998 hay acres or relocate cattle herds to other pastures in the province.

Because the current situation is so serious, for the first time, the Minister of Agriculture, Food and Rural Development instructed the Agriculture Financial Services Corporation (AFSC) to make adjustments to its forage insurance claim payment schedule. Normally, pasture claims are paid in late October or early November of the same year in which the claim is made. Because of the drought, and the steps producers have to take to address the situation, they need access to funds to help with the additional and unforeseen costs. AFSC will provide advance funds to forage clients of up to 50 per cent of coverage (on selected coverage levels). This advance provides a portion of the client's projected final indemnity payment.

It is estimated that up to 1,000 producers with forage insurance could apply for the advance and that the total amount of money paid out could be between $4 and $5 million. AFSC is taking steps to minimize the risk of overpayment; however, if some producers are overpaid, they will be required to repay the overpayment.

Although dry conditions are most prominent in the Peace River Block and eastern Alberta, AFSC will also consider applications from the other dry areas in the province.

This payment program only applies to producers who purchased hay or pasture insurance for the 1998 crop year. Producers not covered by such insurance may qualify for a claim under the Farm Income Disaster Program (FIDP). All producers with questions regarding either program are encouraged to call their local AFSC office.

Contact: Ron Glen
(403) 427-2137

Growing strong with the Alberta greenhouse industry

The rush of spring, as flower beds and gardens are planted, it's easy to see this time of year as the beginning of the horticultural season. Not so for greenhouse growers.

"Bedding plant greenhouses start their season in February so that crops will be ready for Albertans to transplant into their yards in May and June," says Jim Calpas. "Alberta greenhouse vegetable growers start their crops even earlier, tomatoes and peppers are seeded in November, cucumbers in December and January. The fruits of this labour start showing up in the produce department of stores in March, with the crops producing right through until the following November.

Greenhouse crop production is the most intensive form of crop production known and Alberta has a very strong greenhouse industry. There are 73 hectares (180 acres) of greenhouse production in the province contributing over $63 million to the Alberta economy annually.

"Bedding plant production accounts for 62 per cent of the greenhouse production area in Alberta," says Calpas. "Cut flowers, potted flowers, foliage plants, cucumbers, tomatoes, peppers and tree seedlings for reforestation, are also major greenhouse crops in the province."

The greenhouse industry in Alberta is steadily expanding and the Greenhouse Crops Program at the Crop Diversification Centre South (CDCS) at Brooks, works to support the continuing development of this vibrant industry.

"The Greenhouse Crops Program has both extension and research components that operate to assist the Alberta Industry," explains Calpas. "The extension service delivers technical production information to both entry level and established growers. The research program operates in about 1,400 square metres (15,000 square feet) of greenhouse space at CDCS and develops new production techniques, investigates performance of new greenhouse varieties and generates information which is specific to Alberta's greenhouse growing conditions for a variety of crops. The research program goes hand-in-hand with the extension program by developing the technical information that is transferred to the growers."

The research greenhouses at the Centre are managed just as a commercial greenhouse would be. Crops are grown at the same planting density, using the same varieties and growing techniques as commercial growers. In this way, when research results are published, growers know that the results relate directly to their own growing systems. The research greenhouses are also operated to be as environmentally friendly as possible, there are no pesticides used in the production of the vegetable crops grown at the Centre.

The program at CDCS operates in close cooperation with the Greenhouse Crops Program at the Crop Diversification Centre North in Edmonton. Together these programs address the research and extension concerns of greenhouse growers throughout the province. The staff of both centres publish a monthly newsletter for the greenhouse industry called ***Greenhouse Coverings***. This newsletter is available on Alberta Agriculture's Internet site: **www.agric.gov.ab.ca**

Contact: Jim Calpas
(403) 362-1312

Late June rains help farmers

During the last week of June, the first widespread rain of the growing season covered the southern two thirds of Alberta. Precipitation totals of 50 to 125 mm were reported in southern and central regions. The north east region reported between 25 and 50 mm. The Peace region remained dry with isolated showers of 0 to 25 mm.

"Many parts of the province had conditions very different from what the monthly averages show," says Peter Dzikowski, agri-weather specialist with Alberta Agriculture, Food and Rural Development. "During the first three weeks of June a pattern developed with showers covering most of the southern and central regions, leaving the northeast, northwest and Peace regions dry."

The Alberta provincial average precipitation of 98.9 mm was 25.1 mm above the 1961 to 1990 average of 73.8 mm. All agricultural regions reported above normal precipitation except the Peace region. Amounts of 14 to 210.2 mm, or 22 to 277 per cent of normal, were reported. The Peace region and parts of eastern Alberta were the driest areas in June.

"Medicine Hat reported the greatest precipitation departure with 155.8 mm or 277 per cent of normal," says Dzikowski. "About 99 mm of this amount was reported on June 27, the most precipitation reported for one day at Medicine Hat in the past 55 years. On the dry side, High Level reported 14 mm of precipitation in June, only 22 per cent of it's long term average."

The provincial average June temperature was 0.4 degrees below the 1961 to 1990 average of 14.4 degrees C. The Peace region reported above normal monthly average temperatures. The northeast and northwest regions reported near normal temperatures while the southern and central regions reported below normal temperatures.

June temperatures ranged from 3.3 degrees below normal to 1.6 degrees above normal. These averages are based on data recorded at 62 Environment Canada climate stations across Alberta.

"Growing degree day totals from April 1 to June 28 were six weeks ahead of normal in the Peace region, three and a half weeks ahead in the north east region, two weeks ahead in the central region, one week ahead in the southern region and near normal in the northwest region," adds Dzikowski. "Growing degree day totals are used for comparing the progress of a growing season to the long-term average and are useful for estimating crop development stages and maturity dates."

You can find more details at the Robin' The Web Internet site: **http://www.agric.gov.ab.ca/navigation/sustain/climate/index.html**

Contact: Peter Dzikowski
(403) 427-3594

Time to think about Christmas Poinsettias

By the middle of July, rooted cuttings of poinsettias will start arriving in Alberta greenhouses so that Albertans can get a nice quality plant by late November.

"Growing poinsettias is a horticultural challenge because these plants require special care in terms of temperature and fertilizer management," says Dr. Mohyuddin Mirza, greenhouse crops specialist, located at the Crop Diversification Centre North, Alberta Agriculture, Food and Rural Development, Edmonton. "Warm temperatures can slow down the development of color in bracts and cooler temperatures can slow down the growth of plants."

Poinsettias change color starting around the third week of September when natural day light is getting less than 12 hours. This coloring process can be stopped or slowed if a yard light is left on or if the greenhouse is too close to other sources of light like cars.

"Poinsettias also need high amount of nitrogen and molybdenum," says Mirza. "Alberta growers use a higher amount of copper as part of the fertilizer program and that helps with the shelf life of the plant. In November and December, when it comes time to shop for poinsettias, look for Alberta grown poinsettias, they have better quality."

Contact: Dr. Mohyuddin Mirza
(403) 415-2303

Alberta 4-H representatives attend Youth Leadership Seminar

Four Alberta 4-H'ers were recently given the unique opportunity to participate in the annual Provincial Youth Leadership Retreats held at Blue Lake Adventure Lodge in Hinton, Alberta. The seminars were held in two sessions over the summer. The first session took place June 28th to July 3rd, the second July 5th to 10th. Delegates will also return for a follow-up seminar in October.

The Alberta 4-H Programs Trust provides sponsorship so that delegates from the Alberta 4-H program can participate in the annual seminar. Eran Hawkwood of Cochrane, Janice Laidlaw of Bow Island, Deanna Vogel of Foremost, and Kindra Wagstaff of Sedalia were selected to attend the seminar at the Provincial 4-H Selections program in May. These delegates were chosen from 142 members based on their leadership abilities, interpersonal skills, community involvement and 4-H experience.

Cont'd on page 5

"The purpose of the program is to enhance leadership, communication and self-awareness skills in youth who are considered leaders in their communities," says Marguerite Stark, provincial 4-H programs specialist with Alberta Agriculture, Food and Rural Development. "The program combines small group learning opportunities and group challenges to encourage the development of effective and dynamic leaders." Delegates participated in sessions and discussions on group dynamics, values, goals and relationships. There are also many opportunities to participate in outdoor recreation and fun activities throughout the week.

For more information on 4-H Programs, visit the Alberta Agriculture, Food and Rural Development Internet site at: **http://www.agric.gov.ab.ca/4h**

Contact: *Marguerite Stark*
(403) 948-8510
Janice Laidlaw
(403) 545-2740
Kindra Wagstaff
(403) 326-2213
Eran Hawkwood
(403) 932-6186
Deanna Vogel
(403) 867-3709

4th Annual Provincial 4-H Horse Classic

Over 170 4-H members and volunteers will gather at Olds College **July 29 to 31, 1998** for the Provincial 4-H Horse Classic. Horse Classic, a part of 4-H Project Congress, is an exciting program that challenges the knowledge and skills of 4-H horse project members.

"Members will participate in team competitions that test their equine knowledge, communication skills, and marketing skills," says Henry Wiegman, provincial 4-H agriculture specialist with Alberta Agriculture, Food and Rural Development. "4-H'ers will benefit from knowledge presented in Industry Clinics, and also learn from one another throughout the three-day program."

The general public is welcome to come and observe the displays, demonstrations and marketing presentations put on by the participants in Horse Classic. Events of interest to spectators include: Horse Bowl at 3 p.m. and Team and Individual Demonstrations at 7 p.m. Wednesday July 29th, judging contest at 10 a.m. Thursday, July 30th, and the Individual Marketing Contest at 8 a.m. Friday, July 31st.

Horse Classic is made possible by generous support from Lammle's Western Wear and United Farmers of Alberta.

For more information on 4-H Programs, visit the Alberta Agriculture, Food and Rural Development Internet site at: **http://www.agric.gov.ab.ca/4h**

Contact: *Henry Wiegman*
(403) 422-4H4H (4444)

Grain, livestock and soil

With the reduction of subsidized freight rates, increased construction of inland grain terminals (two large terminals being built at Rycroft), and the demolition of many older grain elevators, farmers are investigating alternative grain markets and alternative income sources. The question is, what affect will this have on soil quality in Alberta?

"In the past, feed grain was often moved by the train-load to eastern or western ports," says John Zylstra, soil conservation coordinator, Alberta Agriculture, Food and Rural Development, Fairview. "It was sometimes commented that the outcome of the feed grain in these train-loads was, for every four rail cars – one ended up as meat and the other three ended up as manure. So in a sense, Alberta was shipping carloads of manure down the railway."

This manure is really organic material filled with nutrients that Alberta soils produced and then lose to soils in other parts of Canada or the world.

"Manure shipped out of province represents a lost opportunity in terms of improving Alberta soils," says Zylstra. "Many Alberta soils could benefit from the additional organic material that manure contributes. Manure provides a more stable source of nutrients for plant growth and helps make soils more drought tolerant."

An increase of livestock production to use the forage and feed grain produced in the province will not only provide an alternative income source, but can also provide a benefit to soil quality in most areas of the province, recycling more nutrients in the area where they were produced. A well managed nutrient cycling plan contributes to the financial viability of agriculture and to the maintenance and improvement of soil quality.

Contact: *John Zylstra*
(403)835-2291

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51534 4022

Agri-News Briefs

Precision farming week

Olds College is hosting the first Precision Farming Week on July 27 to 31, 1998. The week gives producers, machinery dealership personnel, agronomists, researchers and chemical applicators a unique opportunity to experience precision farming tools and techniques at this hands-on summer conference. The week-long event offers four courses:

- Fundamentals of precision farming
- Farm record keeping and data collection for precision farming
- Precision farming equipment operation, and
- Decision support systems and crop modelling

There is also a two-day conference and trade show planned for July 28 and 29. The conference features 16 speakers in three concurrent sessions emphasizing machinery, profitability, hardware, software, agronomy, soils and environmental sustainability. For further information on Precision Farming Week, contact the Doug Pearce, Dean, Agricultural Mechanics and College Accessing, Olds College, (403) 556-8284.

Protecting Bees from insect spray

This year in Alberta, there are four insects that could cause problems for both crop producers and beekeepers – Lygus bugs, Bertha Army Worms, Grasshoppers and possibly Cabbage Seed Pod Weevil. These insects are being closely monitored and if their population levels become "economically significant" it could lead to wide spread spraying. Beekeepers are urged to be aware of the potential dangers and take steps to acquaint themselves with the situation in their area. Something as simple as talking to area producers and asking to be advised if spraying is imminent could make a huge difference. The bees in Alberta apiaries and beeyards can be protected from the effects of insecticides with a little cooperation and advance preparation. For further information, contact Kenn Tuckey, provincial apiculturist with Alberta Agriculture, Food and Rural Development, (403) 422-1789.

Alberta Farmers' Market Week

Ever tried birch syrup on pancakes? How about semusas as appetizers for next week's party? Goat cheese anyone? Combine these intriguing taste opportunities with an abundance of fresh fruits and vegetables, and it adds up to an Alberta shopping experience without comparison...a visit to an Alberta Farmers' Market. To encourage Albertans to try this unique shopping experience, markets throughout the province are planning special events for Alberta Farmers' Market week, July 19 to 25. Free coffee and a chance to chat...strawberry festivals...quilt shows...complimentary cake and continuous free draws. With this year's early growing season, the best of Alberta grown vegetables and fruits are available earlier and in large quantities. Help Farmers' Market vendors celebrate the bounty of their work with a visit to the local Farmers' Market during this special week. For a complete listing of the markets currently operating in the province, contact Simone Demers Collins, Farmers' Market administrator, (403) 422-1789, or contact the market manager in the local area. There are also copies of the Alberta Farmers' Market brochure, a list of markets and their hours of operation, available from the Alberta Agriculture, Food and Rural Development publications office, 7000 - 113 Street, Edmonton, AB T6H 5T6.

Agri-News

July 20, 1998

Tall stubble, a practical snow management tool

Droughts in southeastern Alberta during the 1980's resulted in considerable interest in ways to manage stubble to conserve soil moisture. In the brown soil zone, tall stubble has proven to be the most practical snow management tool.

A study was initiated in 1993 by the Chinook Applied Research Association, the M.D. of Acadia, Alberta Agriculture Food and Rural Development, and Farming for the Future to study crop and soil responses under three stubble handling methods in a durum wheat-fallow rotation. The study, at a site south of Acadia Valley, compared tall stubble from direct combining, short stubble from swathing and alternate height trap strips

"The alternate height trap strips, made by direct combining the crop at two different stubble heights showed no advantages in snow accumulation, soil moisture gain or crop yield," says Allan Howard, soil moisture specialist, Alberta Agriculture, Food and Rural Development, Lethbridge. "Tall stubble showed the best combination of snow trapping and soil moisture conservation. The short stubble, while not as effective in snow trapping, had overwinter soil moisture gains that were similar to the tall stubble.

"The short stubble treatments had the cut straw chopped and blown evenly over the soil surface, creating a mulch that reduced evaporation. There was no direct effect of the treatments on crop yield. The results suggest that in the Brown zone, where snowfall is limited, good residue management practices, such as direct combining, and well-chopped, evenly spread straw can be effective moisture conservation tools. Trap strips may be best used under special conditions, such as lodging, where stubble must be cut very short."

A new treatment was added in 1996 to examine the effect of baling and removing straw from short stubble. Preliminary results suggest that when the straw mulch is not present, less moisture is conserved.

"The study is planned to continue at least through the year 2000," adds Howard.

The timing of spring snows and rains, fall moisture contents, and surface runoff during snowmelt are factors that influence overwinter soil moisture gains. In this study, wet fall soils were present in two of the four years, and a late spring snow following ground thaw, happened in another year. These reduced the differences between the treatments. To fully assess the treatments, data from several years must be evaluated.

Contact: Allan Howard (403) 381-5861

This Week

Tall stubble, a practical snow management tool 1

4-H members travel Canada 2

4-H delegates take in Operation Enterprise '98 2

Straw and chaff management critical to direct seeding success 2

Alberta delegates attend Montana 4-H Congress 4

Farmers have more time to complete paperwork for FIDP claims 4

Blooming opportunities on the prairies 5

Briefs 6

Agri-News Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta AGRICULTURE, FOOD AND

4-H members travel Canada

The annual Royal Bank 4-H Interprovincial Exchange launched in Calgary, July 6 to 8, 1998. Five excited Alberta 4-Hers were present to bid farewell to their home province for two weeks, and five 4-H members from Eastern Canada arrived for a stay in Alberta.

"Alberta delegates travelled to different provinces in Canada. Rheana Flitton of Vulcan went to Manitoba, Cindy Vermeeren of Scandia went to New Brunswick, Erin Murphy of Bonnyville travelled to Nova Scotia, Robyn Hayward of Calgary was able to visit Ontario, and Kate Kroetsch of Heisler travelled to Prince Edward Island," says Marguerite Stark provincial 4-H programs specialist with Alberta Agriculture, Food and Rural Development.

The Royal Bank of Canada, sponsors of this opportunity for 4-H members to travel Canada, hosted a sendoff banquet for the delegates on the evening of July 6. 4-H'ers were greeted by guest speakers from the Royal Bank of Canada, Alberta Agriculture, Food and Rural Development and a delegate from last year's exchange. On the morning of July 7, the members were at the airport to leave for their respective provinces.

Also on July 7, a group of delegates arrived in Calgary from the eastern provinces to stay with 4-H families in Alberta until July 20. The visiting 4-H members were treated to the sights of Calgary and a morning welcome banquet on July 8, also hosted by the Royal Bank of Canada. The five guests to our province were: Jeanette Crouse of Nova Scotia, staying with the Cadiuex family of Lac La Biche; Belinda Gray of New Brunswick, staying with the Sheehan family of Carstairs; Ian Richardson of P.E.I., staying with the Turre family of Halkirk; Tracy Caswell of Ontario, hosted by the Dear family of Wetaskiwin and the King family of Manning; and Kim Mozdzen of Manitoba, staying with the Hawkwood family of Cochrane and the Kumpula family of Lac La Biche.

"The Royal Bank Interprovincial Exchange is an excellent opportunity for 4-H'ers to learn about agricultural diversity in Canada," says Stark. "Delegates also learn about different customs and lifestyles across provinces while developing lasting relationships with rural families in other provinces."

4-H'ers participating in the exchange return home on July 20. For more information on 4-H programs, visit the Alberta Agriculture, Food and Rural Development Internet site at: **http://www.agric.gov.ab.ca/4h**

Contact: *Marguerite Stark*
(403) 948-8510
Rheana Flitton *(403) 897-2145*
Cindy Vermeeren *(403) 362-3852*
Erin Murphy *(403) 826-5477*
Robyn Hayward *(403) 931-2569*
Kate Kroetsch *(403) 889-2226*

4-H delegates take in Operation Enterprise '98

Two senior 4-H members from Alberta were given the exciting opportunity to participate in ***Operation Enterprise***, a management and leadership development seminar in Lloydminster, Saskatchewan, July 6 to 13. The seminar allowed delegates to network with top business executives in discussions and workshops.

Amanda Cole of New Norway and Erin Smith of Jarvie were chosen to attend the conference during the Provincial 4-H Selections Program in May. They were selected from 142 delegates based on their community involvement, leadership abilities, interpersonal skills and 4-H experience.

The Nelson Lumber Foundation and AEC Pipelines each provided sponsorship to send Cole and Smith to the seminar. "Operation Enterprise is a program designed to equip young adults for the corporate world they will enter in the future. Discussions are based at a round table where delegates discuss current issues in business and professionalism with knowledgeable facilitators," says Marguerite Stark, provincial 4-H programs specialist with Alberta Agriculture, Food and Rural Development. "The program also focuses on effective communication skills, responsible leadership and problem solving. Delegates leave *Operation Enterprise* with a greater sense of their own professional development and transferrable skills for the future."

For more information on 4-H Programs, visit the Alberta Agriculture, Food and Rural Development website at: **http://www.agric.gov.ab.ca/4h**

Contact: *Marguerite Stark*
(403) 948-8510
Amanda Cole *(403) 855-2572*
Erin Smith *(403) 954-3978*

Straw and chaff management critical to direct seeding success

For farmers thinking of direct seeding next spring, getting the system in place right now, before harvest is critical. To ensure a successful direct seeding system, the first step is straw and chaff management. This is especially true of the heavy residue of straw and chaff, conditions often found in the black and grey wooded soil zones of the prairies. Residue not spread properly creates seeding problems such as hair pinning with the disc-type openers, plugging between the sweeps of air-seeders, weed control problems, as well as, cooler soil temperatures and delayed crop emergence where piles are left undisturbed.

Cont'd on page 3

"Even and wide distribution of straw and chaff with a spreader that will work under the very worst conditions one might encounter is paramount," says Mark Olson, agronomist, Alberta Reduced Tillage Initiative, Leduc. "Most new combines come equipped with good straw and chaff spreaders or are easily adapted to after market units. However, when it comes to older combines, converting to a better spreading system is usually more difficult."

The cost, spread width, intended purpose – chaff spreader only or combination of straw and chaff spreader – and type of drive, varies between units (a comparison chart that includes dealerships in western Canada known to the author, follows).

As for the plugging of the shanks, cutting stubble height to the equivalent, or shorter, compared to the shank spacing of your seeding tool will all but eliminate the problem.

"Crop rotation is another important management tool in dealing with heavy residues," says Olson. "Avoiding planting high residue crops back to back has been quite effective. Alternating low residue crops like canola and field peas with the cereals, and working forages into the rotation can help. In rotations where heavy residue crops are back to back, removing the straw through baling periodically probably isn't that detrimental to the soil quality especially if it's returned back to the field in the form of manure. Last, the use of semi-dwarf varieties has helped eliminate difficult residue situations."

Farmers thinking of switching to direct seeding must do their homework. Chaff and straw management is just one piece of the puzzle. For more information call the closest Alberta Reduced Tillage Initiative agronomist.

Contact: Mark Olson (403) 980-4898

Cost f.o.b.

Brand name/location	*Cost*	*Width of spread*	*Warranty*	*Comments*
Kirby				
Dutch Industries Pilo Butte, SK (306) 781-4820	$2094 plus GST	40' to 50' depending whether spreading just chaff or both and straw moisture conditions.	1 year	Primarily for chaff spreading but cone adapter can be fitted for straw spreading. Plumb into hydraulics of pickup. Won't fit Gleaner combines without major modifications. Sales not sure of horsepower requirements.
Redekop				
Saskatoon, SK (306) 931-6664	$4800 plus GST	35' to 40' varying with straw moisture conditions.	1 year on rotor blades	Spreads both chaff and straw. Easily adapted to new models of Case IH, New Holland TR96-98 series, Massey, Gleaner and John Deere. Will not fit older Massey combines like 760 or 860 models. Require 25 to 35 horsepower.
Spreadmaster				
Stewart Steel Inc. Weyburn, Sk (306) 842-4411	$1150 plus GST	30' varying with straw moisture conditions.	None	Primarily a chaff spreader. Made for Case IH combines exclusively. Belt driven. Horsepower requirement is 1.
Hurricane				
Kayline Rep Sales Saskatoon, Sk (306) 934-0884	$1650 plus GST. Belt driven units are 25 % less.	30' varying with straw moisture conditions.	1 year	Primarily a chaff spreader. Maybe belt or hydraulic driven. Suggest a separate hydraulic pump and reservoir unit for Massey 760 or 860.
Rodono Rotor				
Rodono Industries Clive, AB (403) 784-3864	$1800 plus GST	30' varying with straw moisture conditions.	2 year	Primarily a chaff spreader. Rotor replaces drum. Belt driven so horsepower requirements are about the same.

– prices are based on outfitting a Massey 760 or 860 model and may increase or decrease depending on the model of combine and adaptability of unit.
– prices are as of June 15, 1998

Alberta delegates attend Montana 4-H Congress

Four Alberta 4-H members departed for Bozeman, Montana on July 3, 1998 to attend the annual Montana State 4-H Congress. Curtis Burger of Stony Plain, Carol Luca of Foremost, Trisha Lyster of Mayerthorpe and Quinn Wagstaff of Sedalia were selected to be guests at the congress during the Provincial 4-H Selections program in May. These delegates were chosen from 142 members based on their leadership abilities, interpersonal skills, community involvement and 4-H experience. Mary Remple of Lethbridge and Lynne Lyster of Mayerthorpe acted as chaperones on the trip.

"The members and their chaperones attended the Montana 4-H State Congress on July 7th to 10th," says Marguerite Stark, provincial 4-H programs specialist with Alberta Agriculture, Food and Rural Development. "At the congress they observed contest clinics, livestock judging, public speaking, and demonstrations. Events such as Agriculture Olympics, barbeques, World Games and dances facilitated a fun environment in which to explore the Montana 4-H experience. The Congress is a unique opportunity for delegates to network with a greater diversity of 4-H members and leaders. Delegates are able to gain new perspective on 4-H projects and programs when they experience them outside of a Canadian context."

The Alberta 4-H Programs Trust provided sponsorship to make this award trip possible.

The Alberta delegation had many exciting experiences while en route to and from Bozeman. Chaperones and delegates took advantage of opportunities to see tourist sites, enjoy a whitewater rafting trip and tour historical and landscape sites such as Cameron Falls, Lewis and Clark Caverns and the Old Montana Prison. The members and chaperones stopped in Nevada City to see various tourist sites, including a live theatre presentation, before returning to their Alberta homes on July 13, 1998.

Contact: *Marguerite Stark*
(403) 948-8510

Farmers have more time to complete paperwork for FIDP claims

Farmers have until this fall to supply supporting information for any claims under the Farm Income Disaster Program (FIDP).

Minister of Agriculture, Food and Rural Development, Ed Stelmach says the Government recognizes that this is a busy time of year for farmers. "The detailed information required for a claim under FIDP is necessary, but we understand that some farmers find the process time-consuming. We've streamlined the process as much as possible, and made it fairer for all farmers applying for a FIDP claim."

Alberta farmers applying to make a claim for the 1997 tax year must still submit the completed first page of the FIDP application form with the basic information, such as name and land location. This first page of the application, along with the $50 application fee, must be post-marked by the July 31, 1998 deadline. However, they now have until September 30, 1998, to provide the rest of their supporting information to the Agriculture Financial Services Corporation (AFSC).

If farmers choose not to send in the rest of their application before September 30, their cheque will not be cashed.

The Farm Income Disaster Program is a voluntary, whole-farm safety net program that works with crop insurance to protect farmers against severe and uncontrollable reductions in farm income. Farmers can apply if their margin (the difference between agricultural income and eligible expenses) drops more than 30 per cent in any one year, compared with their previous three-year average.

FIDP was first introduced for the 1995 tax year. The program has recently been extended another year beyond the three-year pilot period, making it available to Alberta farmers for the 1997 and 1998 tax years.Early FIDP claims received to date for the 1997 tax year are up over the same period last year. Most applications are coming from the Peace Country, where farmers have faced two successive years of extremely wet conditions. This trend is similar to last year, when FIDP paid over $13 million to farmers in the Fairview region, the area with the highest percentage of claims in that year.

For the 1996 claim year, FIDP helped 3,628 farmers, paying a total of $57.4 million, or an average of $15,825 per applicant.

FIDP application forms are available through all AFSC offices. For more information, or an application form, farmers can call 1- 800-851-5070.

Contact: *Ron Glen* *(403) 427-2137*
Dave Schurman *(403) 782-8330*

Blooming opportunities on the prairies

Alternative crops, including herbs, spices, flowers and decorative grasses, are making their presence known in the market place. These novel crops have just started being viewed as crops that can be raised for commercial profit. Familiarity with the demand for the different crops is the difficult part of making decisions on what and how much to plant.

"This year, pussy willows were in great demand," says Katie Benschop, owner and operator of Blooming Prairie, Edmonton. "The business turned over almost twice as many pussy willows as last year and ran out of stock every few days. It was reported that in New York City, pussy willows were selling for $70 U.S. a bundle."

Some of the crops being grown to supply an increasing demand include millet, durum, oats, poppies, flax and numerous varieties of flowers. The dried flower business is very good in Alberta with quite a few growers and lots of customers.

"One of the next steps in the ornamental grasses and flower industry involves value-added processing, such as glycerine treatments and dyeing," says Benschop. "There is a very strong interest in herbs, too. St. John's Wort is being planted from Lethbridge to Grande Prairie and many growers are trying Echinacea. The demand for dried culinary herbs is also growing and there is room for many more growers in this market."

Fresh herbs are also under-produced in the province and new growers on a medium scale would likely find a willing and eager market supplying local restaurant and grocery trade. Larger volume growers usually concentrate on the dried herb market.

A big area of interest is the production of seeds of Alberta native wild flowers, grasses and woody plants for reclamation and horticultural uses. Municipal and industrial plantings make up a large part of this market. Wild collected seed isn't a sustainable practice and there is a need to devote some farmland into production of these specialty seeds. The market for non-native seeds of all types is also underdeveloped in Alberta and is another area growers could consider.

Production of fresh flowers for the summer market isn't keeping up with demand this year, either. Supply is very low and that means there's room for new growers of field grown fresh cuts for the Edmonton and Alberta market.

"Research and development for these new alternative crops is one of the areas of focus at the Crop Diversification Centres North and South (CDCN and CDCS)," says Dr. Stan Blade, special crops agronomist, new crop development branch, CDCN, Alberta Agriculture, Food and Rural Development. "The market for these new crops fluctuates greatly and many growers find it difficult to match the demand to what they have growing. Alberta's special crop growers need to develop all the skills and the infrastructure for production, processing, handling and marketing. It is something that will take time, a little trial and error and success, but growing herb, spice, essential oil, decorative grasses and flower crops can be a profitable venture."

To answer some of this need for information, workshops and seminars have been held throughout the province and others are planned.

- a special crops field day and tour is scheduled at the CDCN, Edmonton, on July 30 (contact – (403) 422-1789)
- the Alberta Pulse Growers Commission is holding a Zone 3 tour on July 23 that will stop at the New Pulse and Special Crops plot at Namao (contact – (403) 674-8213)
- the Barrhead Agriculture Service Board Tour is planned for August 6 and will be stopping at APGC-Zone 3 Pulse & Special Crops plot at Barrhead (contact – (403) 674-3331)

For further dates and information on special crops tours and seminars, check the ***Coming Events*** listing on the Alberta Agriculture Internet site: **http://www.agric.gov.ab.ca/event/**

A list of events and additional information are also available on the Blooming Prairie website: **http://www.grower.com**

Contact: Dr. Stan Blade
(403) 422-1789

Katie Benschop
(403) 431-1451
blooming@oanet.com

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51535 0292

Agri-News Briefs

Alberta Hemp Symposia Proceedings

Proceedings from the recent Hemp Symposia, held in Red Deer and Edmonton, are now available. The symposia covered a multitude of topics relating to the growth, varieties, viability and opportunities in hemp production. Transcripts of presentations on the manufacturing of hemp panel prototypes, indigo print and paperworks, the market for hemp oil and developing agri-fibre industries in Canada are all included. The proceedings also feature the presentations by Earth Cellulose Building Materials, CanHemp Corporation and the True North Hemp Company. Fibre hemp research plots have been grown in various parts of Alberta since 1995. These test plots are helping Alberta Agriculture, Food and Rural Development specialists evaluate the potential of this crop for both seed and fibre production and help determine which of the low-THC fibre hemp varieties are best suited to Alberta's climate and soil conditions. Research results of all western Canadian field data are also included in the publication. Copies of ***Alberta Hemp Symposia Proceeding*** can be purchased for $10 plus GST from the Publications Office, 7000 - 113 Street, Edmonton, AB T6H 5T6, by calling 1-800-292-5697 (please add $2 plus GST for shipping and handling of phone-in orders).

SPCA's 1998 Farmer of the Year

The Alberta SPCA is now inviting nominations for the 1998 Farmer of the Year Award. The award is presented annually to a successful farmer whose husbandry methods take into account both the physical and psychological well-being of his or her animals. This may be demonstrated by a modified intensive housing system to better suit the animals or by the use of alternatives to intensive systems. The deadline for nominations is September 11, 1998. The 1998 awards will be presented on October 17. Nomination forms are available by contacting the Alberta SPCA Annual Awards,
10806 - 124 Street, Edmonton, AB T5M 0H3 or by phoning (403) 447-3600.

Lethbridge Research Centre expanding bean research

Additional funding from Alberta Pool's Bean Business Unit will help the Lethbridge Research Centre pursue several projects that will benefit Alberta bean producers. With the funding from Alberta Pool ($250,000) and grants from Agriculture and Agri-Food Canada's Matching Investment Initiative program, the bean program is expected to release at least one new variety each year over the five-year agreement. For Alberta, early-maturing, upright varieties are needed along with improved market characteristics such as bright, shiny colored seed coats. These are just two characteristics identified for research under the agreement. Two new dry bean lines, an early maturing small red and a high-yielding large-seeded pink, received support for registration this year and an improved pinto variety is expected next year. For further information, contact Ron McMullin at the Lethbridge Research Centre (403) 327-4561.

Agri-News

JUL 27 1998

July 27, 1998

Agri-business development certificate program

An Agri-Business Development Certificate program is being offered this fall for business advisors in conjunction with the Centre for New Venture Development, Faculty of Management, University of Calgary. This program is sponsored by Royal Bank of Canada, Meyers-Norris-Penny and Canada/Alberta Farm Business Management Program.

"The program is designed to guide participants through a comprehensive, business development and technology commercialization process, centred on real-life projects the students bring with them," says Doug Barlund, Business Development Advisor with Alberta Agriculture, Food & Rural Development. "Topics presented will include searching and screening ideas, assessing feasibility, securing resources, operational strategies, production and control, legal issues and growth."

This learning process, offered at the University of Calgary, includes six days of in-class work, plus work on a major project during the intervals between class days. The program emphasizes the importance of on-going professor-student contact throughout the whole process via fax, telephone and e-mail, particularly in the intervals between in-class sessions.

The goal of the course is for participants to work through the process using a case study or business development project, resulting in a completed business plan at the end of the program. Participants have the opportunity to present their final plan to a business review panel for critiquing.

"The real advantage is that participants get an appreciation of what it's like to be an entrepreneur going through the process and selling their idea to bankers or investors," adds Barlund. "This program is open to anyone involved in business development, but particularly those who are providing advisory services to emerging entrepreneurs and small business enterprises."The first in-class, learning module begins October 21 to 23, 1998, with subsequent module on December 3 and 4, 1998 and concluding February 19, 1999 This program is financially supported by FBMP, Royal Bank, Meyers Norris Penny and Alberta Agriculture, Food and Rural Development. Registration cost is $500.00 per person. Accommodation, travel and meals are extra.

Contact: *Janice Atwood*
(403) 220-7877
wlong@acs.ucalgary.ca.

Doug Barlund
(403) 556-4245
barlund@agric.gov.ab.ca

This Week

Agri-business development certificate program 1
New resource from Home Study 2
ATB provincial 4-H judging competition 2
Milk does a body good – in more ways than one 2
Agriculture disaster management web page 3
Shell & 4-H help teens learn about themselves and the environment 3
Briefs 4

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**
Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca
Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

New resource from Home Study

An all new ***Animal Health for Cattle*** is the latest home study release. While it is not a do-it-yourself veterinary manual, it helps producers understand the principles of disease and how to work with a veterinarian to prevent disease and establish a preventative health management program.

"People who have used the resource in the past have said that they were better prepared for calving and typical cow diseases and felt more confident in making decisions," says Faye Douglas Phillips, manager, instructional design unit, agricultural education and community services, Alberta Agriculture, Food and Rural Development.

Animal Health for Cattle is designed to help producers:

- recognize signs of disease in the various body systems
- prevent disease in a breeding herd
- provide basic nursing care to sick animals
- use prevention techniques, such as: depopulation, disinfection, fumigation, pest control
- implement a feedlot herd health program
- recognize signs of disease in the different classes of cattle

"The course provides practical guidelines on how to recognize animal disease and appropriate first aid and emergency care skills to use before you call a veterinarian," adds Douglas Phillips.

The first five chapters cover the principles of disease and poison prevention in all livestock.

Topics covered include:

- diagnosis and treatment principles
- prevention techniques
- monitoring health and productivity
- animal welfare issues
- food safety practices

The last four chapters cover reproductive diseases of cattle and the diseases related to breeding cattle, calves and feedlot.

Animal Health for Cattle costs $45 plus GST ($48.15). Canadian orders from outside Alberta require an additional $2 (plus GST) handling fee and U.S. orders a $5 fee. All other countries add a $20 handling fee per course.

To order, write the Home Study Program, #201, 7000-113 Street, Edmonton, Alberta T6H 5T6 and make cheques payable to the Provincial Treasurer or order using your Visa or MasterCard by calling either (403) 427-2171 or leaving a message on the 24 hour service order phone (403) 427-2404.

For more information on the home study program, check the web site at **http://www.agric.gov.ab.ca**

Application forms and information for this and other home study courses are also available from Alberta Agriculture, Food and Rural Development offices or by calling the home study program at (403) 427-2171. Government numbers are toll free by first dialing 310-0000.

Contact: *Faye Douglas Phillips*
(403) 427-2171

ATB provincial 4-H judging competition

Alberta Treasury Branches (ATB) is once again providing exclusive sponsorship for the Provincial 4-H Judging Competition, August 7 to 9, 1998. This livestock judging competition will be held at Olds College, in conjunction with the Olds Agriculture Society Mountain View Country Fair.

"The top 4-H judges from across Alberta will be competing in 14 classes that test their ability to judge livestock, do written and oral reasons, present reasons from a microphone and answer recall questions," says Henry Wiegman, provincial 4-H agriculture specialist with Alberta Agriculture, Food and Rural Development. "Members will also participate in instructional clinics on judging swine, horses, dairy, sheep and beef."

Representation comes from each of the seven 4-H regions in Alberta, totalling an expected 80 4-H competitors and 15 volunteers. Each region sends a designated number of members, selected at local judging competitions. The top 17 judges at the provincial competition will have the opportunity to represent Alberta at national and international competitions throughout next year.

"A four-member team will attend the Northern International Livestock International 4-H Judging Seminar, November 20 to 24, at Agribition '98 in Regina," adds Wiegman. "At this seminar, four members will be named the Denver Western 4-H Roundup Judging Team and will travel to Denver in January of 1999. One of the 4-H judges will be named Denver Western Stock Show Collegiate 4-H Delegate and will also travel to Denver in January 1999."

Contact: *Henry Wiegman*
(403) 422-4H4H (4444)

Milk does a body good – in more ways than one

It's slightly mind-boggling, but if researchers are correct, milk may soon prove to be of greater importance to humans than was previously thought.

With funding from the Alberta Agricultural Research Institute (AARI) and Beatrice Foods, Dr. Lech Ozimek, on behalf of the

Alberta Dairy Association Research Unit at the University of Alberta's Department of Food, Science and Nutrition, recently completed a project looking into the development of novel value-added products from milk for pharmaceutical and food sectors.

Cow's milk consists chiefly of water, fat, carbohydrate, protein and minerals. The protein fraction in particular is responsible for many of the functional characteristics used in the manufacture of dairy products such as cheese, yogurt, sour cream and buttermilk. The composition and relative proportions of the various components of the protein fraction give bovine milk its unique physiochemical, biochemical and nutritional properties.

"Through manipulation of environmental and physical parameters such as pH, temperature and mechanical stress that protein performance can be altered, allowing the product to be used for different things," says Dr. Ozimek.

While Dr. Ozimek's work proves that the proteins can be separated and extracted, the speed and efficiency with which these processes are performed must be improved. As a result, he is currently working on the design and development of novel, high added value, low volume nutraceutical products for pharmaceutical and food uses derived from milk

One thing is certain: milk will continue to be a valuable commodity in Alberta – and abroad.

Contact: *Dr. Lech Ozimek*
(403) 492-2665

Agricultural disaster management web page

The first in a series of disaster management web pages can now be accessed on Alberta Agriculture, Food and Rural Development's Internet site. The series helps farmers anticipate, prepare for and reduce the impact of potential agricultural disasters. The drought page provides information to help farmers better protect their operations in the event of dry conditions. As government will not compensate individuals for insurable losses, it's important that producers be aware of all available tools to help manage their own risk.

"The website emphasizes preparedness, and includes information which farmers can use to make plans and adjust practices in order to minimize their own operational risks," says Laurel Aitken, program development specialist with Alberta Agriculture, Food and Rural Development. "For instance, the drought page includes a checklist of managerial practices such as preserving soil moisture through reduced tillage, crop insurance, FIDP considerations, crop choices, and much more. The checklist provides a step-by-step decision making process over the course of a dry year and features links to more detailed information about risk management options available to the producer. There are also links to a variety of articles and other sites dedicated to drought."

Producers can find the drought page and general disaster information at:

http: www.agric.gov.ab.ca navigation sustain agdisaster

A number of other disaster pages are being developed, including fire, tornados, toxic spills and other events that could affect a farming operation. Look for a flood page later this year.

Contacts: *Laurel Aitken*
(403) 427-3012
e-mail: laurel.aitken@agric.gov.ab.ca

Shane Chetner
(403) 427-3615
e-mail: shane.chetner@agric.gov.ab.ca

Shell & 4-H help teens learn about themselves and the environment

The Alberta 4-H program welcomes Shell Canada Limited as a sponsor of the Provincial 4-H Program, ***People Developing People*** (PDP). Over 200 members at this year's program will participate in Shell Canada Environmental Day, a set of sessions and activities that focuses on conservation and environmental management.

"We are very excited that we can offer a very well-rounded program this year, including a new environmental focus," says Marguerite Stark, provincial 4-H programs specialist with Alberta Agriculture, Food and Rural Development. "We're also adding a third week of the program to accommodate more members."

"At Shell, we believe doing is the best part of learning," says Catherine Kroll, Shell Canada Limited community affairs representative. "We are delighted to work with Alberta 4-H to help their members learn more about the environment and discover how they can make a positive impact on the environment."

PDP is a personal development program for 4-H members 13 to 15 years of age. With support form Shell Canada, Lammle's Western Wear and Alberta Pool, 4-H'ers have the opportunity to increase self-awareness and individual growth in a fun and challenging environment.

For more information, visit the Alberta Agriculture, Food and Rural Development website at:

http://www.agric.gov.ab.ca/ruraldev/4h/index1.html

Contact: *Marguerite Stark* *Catherine Kroll*
(403) 948-8510 *(403) 691-2082*

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51535 1027

Agri-News Briefs

1998 Alberta Horticultural Congress

The 1998 Alberta Horticultural Congress and Prairie West Trade Show is being held at the Mayfield Inn and Suites, Edmonton, November 12 to 14, 1998. This event is organized for professional growers in the landscape, market gardening, greenhouse, fruit growers, and flowers and herb industries. Last year, at the 10th anniversary of this combined event, 600 registrants attended the technical sessions and a total of 1500 people visited the trade show. This year's conference features keynote speaker Jeff Mowatt. Mowatt's presentation is titled *How to Manage Multiple Priorities*. He addresses how to turn chaos into order and how to stop being so busy and become amazingly productive. For further information or to be added to the mailing list, contact Shirley Alton, Congress coordinator, (403) 415-2324.

Fat isn't a bad word

Nutrition scientists say that eating too much fat isn't healthy. But, scientists also say people shouldn't take this to the extreme of being "fat-phobic". It isn't healthy to eliminate all fats or foods that are naturally high in fat, they should just be eaten in moderation. Some fat is important in any healthy diet because it provides energy, essential fatty acids and the fat soluble vitamins A, D, E and K. Eating a variety of foods also applies to different types of fat in a diet. Some foods are naturally high in fat. For example, dairy products and some meats contain a fat called CLA (conjugated linoleic acid). Studies show that CLA reduced cases of stomach, breast and colon cancers. Dairy products have different amount of fat to suit different tastes and different nutrient needs. All milk products offer energy and 15 essential vitamins and minerals including calcium. Canada's Food Guide to Healthy Eating suggests adults have two to four servings of milk products each day; and it's recommended that adolescents and growing children have four servings each day. For further information, contact the Alberta Milk Producers (403) 453-5942 in Edmonton or toll free at 1-800-252-7530.

Manure management research for environmental sustainability

Research to evaluate different types and loading rates of manure to black chernozemic soils is being conducted at three locations in Alberta. Guided tours are being offered of the sites during the second week of August, 1998. Dates and locations of the tours are:

Edmonton Research Station (UofA)

August 11 1:00 - 4:00 p.m.

Four types of manure applied, each at four annual spring application rates. Manure sources include dairy, poultry, swine solid and swine liquid. Application rates of 0, 20, 40, and 60 t/ha wet weight will test the revised *Code of Practice* (1998), nitrogen and phosphorous loading rates.

Pioneer Study Site (UofA)

August 11 4:00 - 5:00 p.m.

Flexible site to accommodate emerging needs for preliminary assessments of feasible mixed manure treatments. Phosphogypsum sub-treatments were applied to the experiment to evaluate the potential desalinization effects of manure.

Moore's Feedlot Research Site (Harmattan)

August 12 12:00 - 4:00 p.m.

Research on mixtures of beef manure and wood by-product mixtures. Four types of manure ranging from calf to finishing with variations of wood by-product contents as well as one treatment of bark and sawdust. The manure application rates tested are 0, 20, 40, 60 t/ha wet weight to test the revised *Code of Practice* (1998) arranged in a randomized block design.

At all three test sites, the soils, vegetation and surface water will be investigated. To register, or for more information, contact Lynette Esak or Michelle Cabalt, Can-Ag Enterprises Ltd., (403) 434-0400, Edmonton.

Agri-News

AUG 6 1998

August 3, 1998

4-H'ers take Agriculture Development Tour to NWT

Twenty-four 4-H members had the opportunity to participate in the 4-H Alberta/Northwest Territories Agriculture Development Tour, July 14 to 23, 1998.

"The tour is an excellent opportunity for Alberta 4-H'ers to learn about agricultural diversity in the Northwest Territories and Alberta," says Marguerite Stark, provincial 4-H programs specialist with Alberta Agriculture, Food and Rural Development. "Members make connections with the agriculture industry and network with 4-H members from the Northwest Territories, a great way to learn about different parts of Canada."

Vanessa Belair of Fort Saskatchewan, Adam Boe of Mannville, Clinton Conway of Innisfree, Bill Davis of Valleyview, Amanda Earl of Crossfield, Lisa Eshpeter of Daysland, Kevin Fletcher of Airdrie, Murray Greilach of Barrhead, Kierstin Heiberg of Kingman, Amber Howard of Vermilion, Erin Krause of Vermilion, Lee-Ann Lohr of Stettler, Amy McLenaghan of Barrhead, Quinn Murphy of Altario, Todd Murphy of Altario, Wes Nail of Carstairs, Joanne Nolte of Morinville, David Ogden of Bezanson, Natisha Parker of Three Hills, Kevin Pederson of Barrhead, Nichole Rude of Sedalia, Micheal Tiltgen of Bowden, Melissa Turre of Halkirk, and Tyler Walton of Hanna were chosen to participate in the tour at the 1998 Provincial 4-H Selections program in May. Delegates were selected based on their leadership and interpersonal skills, community and 4-H involvement.

"The twenty-four participants and adult chaperones camped en route to Yellowknife, visiting various agricultural processing and production facilities," adds Stark. "Some of their educational experiences included visiting market gardens, an experimental farm, a honey farm and plant, forage producers, forestry areas, and learned about transportation and fishing. The group visited Twin Falls, Hay River, Fort Vermilion and other sites while on the trip, taking in various tourist attractions and events."

The 4-H Alberta/Northwest Territories Agriculture Development Tour is sponsored by the Alberta Treasury Branches and the Alberta 4-H Programs Trust.

Contact:	*Marguerite Stark*	*Wendy Boge (chaperone)*
	(403) 948-8510	*(403) 422-2906*

This Week

4-H'ers take Agriculture Development Tour to NWT 1

County of Barrhead conservation plan complete 2

Outstanding local showmanship at provincial 4-H Beef Heifer Show 2

52nd annual provincial 4-H Dairy Show a huge success 4

Keeping lawns healthy in summer 5

Briefs 6

County of Barrhead conservation plan complete

A few years ago the County of Barrhead became began developing a conservation plan. It was decided to adapt/adopt a similar process as the County of Stettler used for its conservation plan. With this goal set, Leon Marciak of Conservation and Development Branch, Alberta Agriculture, Food and Rural Development was approached to help with the process. Through the hard work and cooperation of many people and agencies, the plan is now complete.

"Conservation planning at the municipal level is an effective way to integrate social, economic and physical aspects of land management because municipalities are responsible for the well-being of the population and natural resources," says Marciak.

The issue of sustainable land management is becoming increasingly complex, involving factors such as: compatibility between land uses; local job opportunities; preservation of wildlife habitat; scenic qualities and historic sites; enhancement of recreation and tourism activities; control and abatement of pollution; property rights; trends in public ownership; and, provincial and federal regulations. The municipal conservation planning process can help local government to evaluate and integrate these broad areas of concern and to select the best options.

"The County of Barrhead's plan has three main components," says Tara Donald, regional conservation technologist with Alberta Agriculture. "First, it provides a user-friendly inventory of the soil, water and wildlife resources in a county, outlining the effects of land use on these resources. This information is essential as a base for developing appropriate policy and program directions in resource management.

"Next, the plan identifies conservation issues in a county. The issues are determined through formal data collection and local experience. This provides a strong foundation for the development of specific, locally supported conservation activities.

"Finally, the plan outlines objectives and recommendations to address the high priority issues.This provides a framework for a county to develop specific projects and set budgets and time lines."

Recommended actions resulting from a county conservation plan are best undertaken as cooperative efforts, supported and implemented through programs and projects of the three levels of government, non-government agencies, industry and producer groups. The plan provides a guide for county activities under such programs as the Alberta Environmentally Sustainable Agriculture (AESA) program.

"The plan provides a strategic framework for a continuing process toward sustainable land management," adds Donald. "It represents the best available knowledge and information at the time of writing the plan. The plan can also be used as a reference for information on land resources, programming planning and agricultural production."

The agencies involved with the development of the County of Barrhead's plan include: Alberta Agriculture's conservation and development branch and public lands division, Prairie Farm Rehabilitation Association, Alberta Environmental Protection, Barrhead Economic Development, and the County of Barrhead Agriculture Service Board.

Contact: Leon Marciak (403) 427-3689
Tara Donald (403) 674-8255
Marilyn Flock – County of Barrhead (403) 674-3331

Outstanding local showmanship at provincial 4-H Beef Heifer Show

The Bashaw Agricultural Society Grounds came alive from July 12 to 14, 1998. The focus of all the excitement was 300 4-H members and over 410 cattle competing for top honours at the Provincial 4-H Beef Heifer Show. Enrollment in this annual program was up by 15 per cent from last year, showing its popularity among 4-H members and leaders. As in previous years, the animals and showmen demonstrated outstanding quality across all classes and categories.

Seventy-eight 4-H clubs were represented, that's almost 45 per cent of all beef clubs in Alberta. Local 4-H'ers were involved in many competitions and events throughout the show.

"Events at the Provincial 4-H Beef Heifer Show focus on more than quality of livestock, they are diverse in nature, rewarding members for demonstrating exemplary knowledge, skill and attitudes," explains Henry Wiegman, provincial 4-H agriculture specialist with Alberta Agriculture, Food and Rural Development. "Competitors work as individuals, pairs and teams throughout the three-day competition. A herdsmanship award is also given to the 4-H club showing the most sportsmanship, neatness and consideration for the safety of others. This year, honours in the Herdsmanship Competition went to St. Paul 4-H Multi Club."

The Team Grooming Competition launched the show on Sunday afternoon. Brady Gardner and Tyson Gardner of the Eagle 4-H Beef club took first place in the junior category, Cody Boulton and Robyn Mader of the Calgary Region claimed the intermediate title, and Erin Chromik and Bryce Sutter of the Flagstaff district placed first in the senior competition. These members were presented with their awards by Chad Ross, business unit manager, western Canada for American Breeders Service, Patron of the Day.

Cont'd on page 3

Also on Sunday, teams of four demonstrated their knowledge of cattle anatomy and care in the Beef Bowl competitions. The winning team in the junior category consisted ofAlisha Armstrong, Bassano 4-H Beef; Kayleigh Gulseth, Calmar "Heart of the Country" 4-H; Kyle Lawrence, Chipman 4-H Beef Club and Crystal Young, Lin-Berry-Buck 4-H Beef. The successful intermediate team was Susan Leslie, Iron Creek 4-H Beef; Matthew Rustemeier, Bon Accord 4-H Beef; Kevin Schlegel, Calmar "Heart of the Country" 4-H and Teresa Welsch, Foothills 4-H Beef. The senior team claiming top honours was Kelly Butler, Bashaw 4-H Beef; Curtis Berger, Lakemere 4-H Beef; Morwenna Hodgetts, Camrose 4-H Beef and Christine Schmitke, Cardston Chinook 4-H Beef.

The judging competition had two phases, the individual conformation judging and team show ring judging. In the individual competition, Eric Fehlauer of Calmar "Heart of the Country" 4-H placed first in the junior class, Amy Fox of Armena 4-H Beef placed first among the intermediates, and Garth Rancier of Iron Creek 4-H Beef was the first place senior judge. Rancier was also named the top judge overall in individual reasons and placings. Winners in the judging competition were presented with their awards on Monday by Ron Winter on behalf of Alberta Treasury Branches, Monday's Patron of the Day.

In the show ring judging competition members act as ring man and judge, demonstrating their ability to organize and evaluate a ring of show animals. The dynamic team of judge Crystal Young, Lin-Berry-Buck 4-H Beef Club and ringman Kelly Northley, Bashaw 4-H Beef took first place in the junior category. The top senior team was made up of judge Alison Fehlauer, Calmar "Heart of the Country" 4-H and ringman Erin Krause, Vermilion 4-H Beef.

The Freshmen competition is an important part of the Beef Heifer Show. These classes were only open to members who have not attended the show before. The overall champions were: Justine Schneider, Chipman 4-H Beef Club, Grand Champion Junior Freshmen; David Shneider, Chipman 4-H Beef Club, Grand Champion Intermediate Freshmen and Christine Schmidke, Cardston Chinook 4-H Beef Club, Grand Champion Senior Freshmen.

The showmanship competition, also sponsored by Alberta Treasury Branches, allowed 4-H'ers to demonstrate their skills as exhibitors. Members were judged on their ability to effectively showcase their animal for the official judge. The top Showmen were: Jillian Arntzen of the Iron Creek 4-H Beef Club, junior Showmanship Grand Champion; Mark Shologan of the Pembina West 4-H Beef Club, intermediate Showmanship Grand Champion and Alison Fehlauer of the Calmar "Heart of the Country" 4-H, senior Showmanship Grand Champion.

On Tuesday morning, judges began to choose the top purebred and crossbred animals in yearling, two year old with calf, three year old with calf and breeding project herd classes. Carmen Wright of the Irricana 4-H Beef and Multi club claimed the Supreme Grand Champion Crossbred with her Charolais-cross yearling, *Kabluial 51*. The purebred classes showcased Gelbvieh, Red Angus, Charolais, Hereford, Limousin, Black Angus, Simmental, Shorthorn, Pinzgauer, Murray Grey, Salers and many more. The Supreme Grand Champion Purebred title went to Stacy Young of the Lin-Berry-Buck 4-H Beef Club, showing her Simmental two year old, *RJY Miss Black Amanda 9F*. The winners of the conformation classes were presented with their awards by Jerome Stang and John Lee on behalf of the United Farmers of Alberta, Tuesday's Patron of the Day.

In order to reward participation and success across all events at the Provincial 4-H Beef Heifer Show, Grand Aggregate Awards are presented to one member in each age category. The awards are primarily based on participation in Team Grooming or Project Bowl, Judging, Showmanship and Conformation classes. When members' scores in these competitions were added to determine their final placing, the junior Grand Aggregate was Tyson Gardner of the Eagle 4-H Beef Club, the intermediate award went to Dan Vanderwell, White Rose 4-H Beef & Multi Club, and the senior Grand Aggregate award winner was Alison Fehlauer, Calmar "Heart of the Country" 4-H. In addition to these awards, four individuals were chosen to attend the *National Young Cattlemen of the Year* program in Bashaw July 13 to 16, 1998. Based on aggregate points, the representatives at the program were: Tyson Gardner, Crystal Young, Matthew Gosling and Heather Marcinkoski.

The closing ceremonies on Tuesday afternoon honored the three sponsors of the Provincial Beef Heifer Show: **Alberta Treasury Branches**, **United Farmers of Alberta** and **American Breeders Service - Canada**. "4-H members, successful at events such as the Provincial 4-H Beef Heifer Show, go on to become successful and influential members of Alberta's beef industry," said Rob Smith, master of ceremonies. This was made clear by observing the high quality of showmanship and judging exhibited by members throughout the show. The Heifer Show is hosted by the Bashaw Agricultural Society and administered by Alberta Agriculture.

Contact: Henry Wiegman
(403) 422-4H4H (4444)

52nd annual provincial 4-H Dairy Show a huge success

There was a great deal of excitement surrounding the 70 cattle and 50 4-H members at the Red Deer Westerner Exposition Grounds on July 15th and 16th. The Alberta 4-H Provincial Dairy Show is an annual event that showcases the best of 4-H dairy projects in Alberta.

"The show rewards the knowledge and skills of 4-H members who compete in the clipping, project bowl, judging and dairy husbandry competitions," says Henry Wiegman, provincial 4-H agriculture specialist with Alberta Agriculture, Food and Rural Development. "This year we had more than 500 entries in the show, across all classes and categories."

The annual show was launched Wednesday, July 15 with a sponsored breakfast for 4-H delegates and leaders, followed by the clipping competition. Nancy Ronald, of the Lacombe 4-H Dairy Club took first place honors in the junior category. Logan Chalack, from the Mountain View 4-H Dairy Club took the intermediate honours, and Dereck Van Sickle also from the Mountain View Dairy Club was placed first in the senior class. Dereck Van Sickle was also named the top member overall in the clipping competition.

The Project Bowl competition allows members to demonstrate their dairy knowledge as a team. The team of Dereck Van Sickle, Nathan Taylor, Jessica Simanton, and Craig Fenske claimed this fun competition. The judging competition Wednesday afternoon tested members' skills in assessing the conformation and quality of a group of dairy cattle. Top honours in the junior judging went to Lee Simanton of the Lacombe 4-H Dairy club. The intermediate prize went to Jillian Chalack of the Mountain View 4-H Dairy Club, and the top senior judge was Linsey Chalack of the Mountain View 4-H Dairy club. As the top conformation judge overall, Linsey Chalack was invited to return to the 1999 dairy show as a junior judge.

On Wednesday afternoon members participated in a new competition, the Dairy Skillathon. A series of skill stations that tested the members' knowledge in dairy science and husbandry. Nancy Ronald of the Lacombe 4-H Dairy Club took the junior title in this competition, Jillian Chalack of the Mountain View 4-H Dairy Club took the intermediate title, and Matt Hofstra of the Rollyview 4-H Dairy Club took the senior title.

The Showmanship competition tested members' abilities to display their animal in the show ring. Kim Reitveld of the Rolly View 4-H Dairy Club took the junior showman title, Cristine Hofstra of the Rolly View 4-H Dairy Club took the intermediate title, and Linsey Chalack of the Mountain View 4-H Dairy Club was named senior showman. Linsey Chalack was also named the supreme champion in the showmanship competition and as a result, she will have the opportunity to return to the 1999 dairy show as a junior judge.

Show ring judging is a team event in which top judges act as ringmaster and judge to organize and evaluate a ring of livestock. Judges are evaluated based on their confidence, microphone reasons and skills, appearance and organization. Linsey Chalack and Dereck Van Sickle of the Mountain View 4-H Dairy Club took top honors in this competition.

The conformation classes, held Thursday at noon, were a major attraction. Animals were divided into seven individual categories. Cristine Hofstra of Rolly View 4-H Dairy Club, showing Detimdale Balance Delight was named top calf in the intermediate category. Linsey Chalack of Mountain View 4-H Dairy Club, showing Wendon Mason Recca, took top honors in the senior calf class and Amanda Taylor of the Rolly View 4-H Dairy Club showing her calf, Bernalta Rudolph Guess, received the march calf champion. Jillian Chalack of the Mountain View 4-H Dairy Club, showing Wendon Milan Lucinda, won the junior yearling title, and Sarah Ronald of the Lacombe 4-H Dairy Club, took the senior yearling champion with her heifer, Roneamar Seven Zero Eight. Linsey Chalack of Mountain View 4-H Dairy Club won the summer yearling title showing, Wendon Rudolph Jan while the top winter yearling was Donalta Cerise Mason, shown by Dereck Van Sickle of the Mountain View 4-H Dairy Club. At the completion of all the individual conformation classes, a Grand Champion class was held to name the top animal at the show. Linsey Chalack of Mountain View 4-H Dairy claimed the Grand Champion title with her heifer, Wendon Mason Recce.

Sarah Ronald of Lacombe 4-H Dairy was named Reserve Champion with her heifer, Roneamar Seven Zero Eight.

The final conformation class at the dairy show was the herd class, which allows clubs to showcase their members' projects as a breeding herd. The Mountain View 4-H Dairy received the Champion Club Herd award.

The herdsmanship competition at the dairy show is based on an individual's ability to be helpful to other people at the show, their tidiness and cleanliness, and their knowledge and conduct while at the show. The following members received the Herdsmanship Award: Alexandra Van Zanten, Green Acres Dairy 4-H Club; Jillian Chalack, Mountain View 4-H Dairy Club; Kathryn McDowell, Usona 4-H Dairy Club; Jennifer Rietveld, Rolly View 4-H Dairy Club; Laurena Ronald and Lee Simanton, Lacombe 4-H Dairy Club.

"The Provincial 4-H Dairy Show is an excellent experience for the project members who participate," adds Wiegman. "4-H'ers gain valuable show experience in a provincial ring, they expand their knowledge and skills, and they network with other 4-H members from around the province in a friendly and competitive atmosphere."

The Dairy Industry and Red Deer Westerner Exposition provide sponsorship for the annual Dairy Show. It is also supported by more than forty other generous contributors.

Contact: *Henry Wiegman*
(403) 422-4H4H (4444)

Keeping lawns healthy in summer

What measures 50 ft by 50 ft and creates enough oxygen for a family of four every day? That blanket of green in the front yard. Many people think the front lawn just lays there, but along with creating oxygen, a well-maintained grassed area absorbs noise and airborne pollutants like dust, soot and carbon dioxide.

"Keeping a lawn healthy and growing lush and green is realitively easy with a little care and attendance and regular maintenance," says Shelley Barkley, information officer at the Crop Diversification Centre South, Alberta Agriculture, Food and Rural Development. "Whether in an urban setting or a sweeping rural landscape, lawns require regular mowing. Depending on moisture levels and daytime heat, that could mean at least once, possibly twice a week during the summer."

If lawn is left to grow too long, two mowings may be necessary to take it to the recommended height. The first pass with the mower should remove one third of blade height and the second cut should reduce the lawn to the desired height. For summer-time, 2.5 to 3 inches (6.3 - 7.6 cm) is optimum height for a healthy lawn.

"Leaving lawns at these higher heights will help reduce moisture loss that causes heat stress to grass,"says Barkley.

If experiencing sufficient rainfall, lawns do quite nicely with only regular mowing. However, lawns need thorough watering at least every 10 days. Thick lawns significantly slow down water runoff and are very efficient in directing moisture into the soil. Even light rainfall, can hold significant benefits for healthy lawns. If, however, there has been no rainfall, a good soaking of two inches (5 cm) should be applied. With reasonable water pressure, this should take approximately one-half hour with a sprinkler. It's time to water the lawn when it changes color to a blue-green, or when foot prints are noticeable in the turf when walked on.

"Nothing is more aesthetically pleasing than a beautiful lawn," adds Barkley. "And, when the heat is on in the summer, that lush expanse of grass can be 10 to 14 degrees cooler than non-grassed soil and up to 30 degrees cooler than decking, asphalt or concrete. No wonder lawns are the favorite lounging place on hot summer days."

A variety of pests can cause problems in lawns. The publication ***Backyard Pest Management in Alberta*** is a valuable resource that contains information on over 150 pests that commonly damage trees, shrubs, lawns, flowers and gardens. It help when identifying whether insects, disease or weeds are causing the problems in a lawn. Copies of the publication are available at Alberta Agriculture district offices or the Publications Office, 7000 - 113 Street, Edmonton, AB T6H 5T6, phone 1-800-292-5697. Price of the publication is $5 plus GST, please add $2 plus GST for shipping and handling on phone or mail-in orders.

Other resources, such as the Prairie Gardener Leaflets, are available through the Landscape Alberta Nursery Trades Association (403) 489-1991 in Edmonton, or toll free 1-800-378-3198.

Contact: *Shelley Barkley*
(403) 362-1305

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51535 1142

Agri-News Briefs

Time to mind the tea roses

The wintering of tea roses begins in summer. Stop fertilizing the plants at the end of July and, in August, cut roses with shorter stems. Cut back water in September, but never let the plants dry out. After several hard frosts, water the plants well, head the canes back to 20 to 25 cm and put winter insulation in place. Put about 30 cm of insulating material, such as peatmoss, compost or soil around the canes and the crown. Don't pack the material too tightly. In the spring, about the time the native poplars begin leaving out, begin gently removing the insulating material from the plant. For more information, contact Shelley Barkley at the Crop Diversification Centre South, Alberta Agriculture, Food and Rural Development, (403) 362-1305.

1998 ASJA Classic Horse Show

The Alberta Show Jumping Association (ASJA) is holding their annual show on August 27 to 30 at the Tyrrell Farms, Calgary. This year, the four-day horse show format is augmented by a third showring indoors and offers numerous 2'6" hunter divisions including the Pony Hunter, Novice Rider and Novice Horse. With the added divisions, the ASJA Pony Medal and Pony Medal year end Final will also be offered at the show. Other changes to the prize list include the addition of Pre-Green and Combined Hunter Divisions in the main showring. On the final day, in the jumper ring, there will be three events: the 4'6" Alberta Cup, the Mini Prix and the addition of a 3'6" Child/Adult Jumper Class. The annual ASJA banquet and awards night will be held on August 29 at the Hospitality Inn, Calgary. The banquet includes the announcement of the CET Regional Final winners and all of the year end cooler and scholarship presentations. For further information, contact Stephanie Christmann (403) 256-4637, Debbie Garside (403) 256-2288 or Donna Hammer (403) 275-9418.

Harvest Day in Donalda

On August 11, the Alberta Reduced Tillage Initiative (ARTI) in cooperation with Ducks Unlimited Canada is holding a Harvest Day. The Harvest Day begins at 10:00 a.m. and runs until 2:00 p.m. On site, fall seeded canola (Quest) and winter wheat (Kestrel) will be discussed. The agronomy unit also has feature plots on the site. Various combines (including the Lexion 485 Combine) will be present for a harvest demonstration. The Harvest Day is located one mile West and two miles North of the town of Donalda (LLD - N 1/2 of 12 - 42 - 19 W4 M) For further information, contact Grant Nelson, ARTI agronomist at (403) 742-7546 or e-mail: grant.nelson@agric.gov.ab.ca

Grazing Alfalfa

Alfalfa, a very drought tolerant grass, is at times used as grazing forage. The obvious concern is bloat. While there is always some risk when grazing alfalfa, it has tremendous feed value. Some things to keep in mind are:

- younger animals are more bloat prone than older animals
- some animals are very bloat susceptible and may need to be removed from alfalfa grazing
- most bloat occurs on immature, rapidly growing alfalfa. Once alfalfa has flowered the risk of bloat is considerably reduced
- generally, the more mature the alfalfa, the less the risk of bloat
- when introducing cattle to alfalfa make sure they are well fed first. Move cattle onto alfalfa around mid-day, away from primary grazing times (morning and evening)
- once cattle are on alfalfa leave them unless bloat risks become too high. Gradual introduction to alfalfa creates more problems with bloat
- provide some dry feed (hay or straw bales) on pasture
- observe cattle regularly, especially in the mornings
- if cattle appear to be starting to bloat, running them around the pasture will often help them release gas buildup
- severe bloat cases require stomach tubing and a vegetable or mineral oil, or stabbing through the rumen wall to release gases
- rumensin capsules for yearlings or feeding Bloatgard pellets markedly reduces bloat incidences and their severity.

For further information, contact Terry Holmgren, beef specialist - cow/calf, Alberta Agriculture, Food and Rural Development (403) 645-6301.

Agri-News

August 10, 1998

Soil quality benchmark sampling

Long-term soil sampling to monitor soil quality across Alberta landscapes starts this fall. Soil quality benchmark sites are currently being selected by the conservation and development branch of Alberta Agriculture, Food and Rural Development, in partnership with agri-businesses, research associations and other divisions of Alberta Agriculture.

"Monitoring these benchmark sites is part of the Alberta Environmentally Sustainable Agriculture (AESA) Soil Quality Monitoring Initiative," says John Zylstra, regional conservation coordinator with Alberta Agriculture. "There are two goals for this program. The first is to determine the state of soil quality across Alberta and the second is to determine the risk of change in soil quality with various management practices."

The fall benchmark sampling across Alberta will provide baseline soil information; test and validate simulation models (crop growth, wind erosion, water erosion); and, monitor changes in soil quality over time on a field basis.

"As well as providing data for modelling, the benchmark sites will give an indiction of year to year changes in soil fertility status at the same point," says Zylstra. "They will also provide data on the landscape effects upon soil properties."

Within the agricultural region of Alberta, there are nearly 100 ecodistricts, or areas of similar topography, soil, vegetation and climate. Alberta Agriculture will monitor sites within 40 to 50 ecodistricts throughout Alberta for the next five to 10 years. These soil quality benchmark sites will be representative of soil-landscape patterns and agronomic practices within a given ecodistrict.

"At each benchmark site, soil and plant sampling will occur at three landscape positions: shoulder, mid-slope and toe slope," adds Zylstra. "Information supplied by landowners is important to the initial characterization of the sites. They will assess the soil data collected and provide input for simulation models. Land management information required from farmers includes: crop rotations and crop cultivars; fertilizer applications; weed control practices; tillage system; harvest method; and, grazing practices.

Cont'd on page 2

This Week

Soil quality benchmark sampling 1

Packaging retains freshness 2

Fall cutting alfalfa 2

Crop walks benefit the entire community 3

4-H summer camp a journey to remember 3

New draft irrigation legislation ready for public comment 4

"F" stands for Farm in the new AFAC name 4

Briefs 5

"The information collected will give detailed soil quality status on a range of soils across Alberta and landscape effects on soil quality and soil quality risk assessment. It will also provide a cross validation data set across Alberta for soil quality modelling efforts and a record of year-to-year changes in soil properties at constant sites in the province."

Contact: John Zylstra
(403) 835-2291

Packaging retains freshness

New research findings are helping to keep the 'fresh' in fresh vegetables.

"Once fresh produce is harvested, normal tissue respiration that is the taking in of oxygen and giving off of carbon dioxide, water and heat, reduces quality of produce by causing undesirable changes in appearance, taste and texture," says Janet Panford with the National Research Council.

Recent research conducted by Panford while a food scientist with Alberta Agriculture, Food and Rural Development, indicated that Modified Atmosphere Packaging (MAP) can extend the shelf life of fresh produce by slowing down the rate of respiration and reducing moisture loss. The process involves modifying the composition of the natural atmosphere inside a package by surrounding the food product with a selected combination of gases, normally found in the atmosphere we breathe, and then sealing the package.

The research tested samples of head and romaine lettuce, carrots, broccoli, cabbage and cauliflower.

"The study found that highly perishable products such as cut lettuce, cole slaw and cauliflower, can be kept fresh under altered gases and ready to eat for up to seven days," Panford says. "Broccoli was found to stay fresh longer when carbon dioxide was not allowed to rise excessively inside the package. Carrot sticks have excellent keeping quality (28 days) in altered gas environment."

With the possibility of an extended shelf life for Alberta's fresh vegetables, greater economic value can be realized by Alberta growers and processors, with a greater variety and health benefits realized by consumers.

Contact: Dr. Janet A. Panford
National Research Council
Saskatoon, Saskatchewan
Ph: (306) 975-4711

Janet Kanters
Alberta Agriculture Research Institute
(403) 422-1072

Fall cutting alfalfa

The time of taking the last cut of alfalfa may affect the amount of winter injury, winter kill and the yield of next year's first cut. The last cut can influence the amount of food reserves left in the plant over winter and that impacts the new spring growth.

"Winter survival and productivity of alfalfa are influenced by plant food reserves in the roots," says Richard Guitard, cereals and oilseeds specialist with Alberta Agriculture, Food and Rural Development, Valleyview. "Food reserves are required to harden off the plant in fall, carry it through the winter and be sufficient to start a vigorous new growth in the spring. Along with food reserves, a plant cover, either top growth left in the field or higher stubble after cutting, helps hold snow and provides insulation for the crowns and roots."

Studies by Lacombe Research Station on the effect of different fall harvest dates have indicated differences in winter survival and the yield the following year. In these trials, the first cut was harvested in late June or early July and second cut at eight different dates from August 13 to October 1.

"The critical harvest period was from mid-August to early September at the Lacombe sites," says Guitard. "Critical harvest period being the time when the last cut of hay is taken resulting in the greatest yield loss of the first cut the following year. Delaying the second cut until September 10 to 17 resulted in a yield increase of 20 to 25 per cent compared to harvesting the final cut in mid-August to early September. The critical harvest period will vary with location. Generally, there is very little regrowth after early September."

Food reserves in alfalfa decline rapidly in the initial period following cutting because the reserves are used to produce new growth. The balance between demand on reserves and replenishment from photosynthesis is reached in about three weeks after cutting dates. Three weeks after cutting an accumulation of reserves begins. It may take four to six weeks following cutting for reserves to again reach the level they were at harvest. Taking the last cut of alfalfa later ensures that there is very little regrowth before freeze-up leaving food stores in reserve for the plant to over-winter.

"Other factors, such as variety of alfalfa, fertility level of field, age of stand, cutting height and the stage of growth at the time of taking the final cut, also affect winter survival and winter injury of alfalfa plants," adds Guitard. "Disadvantages of delaying harvest until after the critical harvest period include problems with drying the crop and leaf loss if there is frost damage. Generally there are no problems with nitrate buildup in second cut alfalfa. If frost does occur before cutting the second crop, there shouldn't be a buildup of nitrates in the same manner as occurs with annual crops harvested after a frost."

Cont'd on page 3

A feed test for nitrates is a good idea as it gives exact levels present and should nitrate levels be high, other feed can be used to dilute and balance the feed ration.

Contact: *Richard Guitard*
(403) 524-3301

Crop walks benefit the entire community

At this time of year there are limited activities that will improve a crop. However, potential insect and disease problems can be spotted and yield loss situations can be observed to prevent future problems.

"One of the best observation methods that can be employed is to get a group of neighbors together with a cereal and oilseed specialist and do a crop walk," says Jay Byer, cereal and oilseed specialist with Alberta Agriculture, Food and Rural Development, Bonnyville. "A crop walk is a group of interested individuals checking a number of fields, looking for unusual crop conditions that can be identified and dealt with in a positive, supportive manner. Crop walks, that can improve the bottom line for all involved, are supported by the Alberta Canola Producers Commission (ACPC)."

During a crop walk, the following problem areas are specifically looked for: insects and diseases can still be stealing yield. Spotting conditions that could build up into major problems before harvest can improve the bottom line for an individual producer and could also prevent the spread of these conditions to neighboring fields.

A cooperative approach to crop walking can help identify problems such as:

- **fertility and weeds** – nutrient deficiencies can be a major problem and it's often too late to deal with them but deficiencies can lead to increases and spread of weed seeds. These seeds can spread to other farms by natural methods and cause problems for the whole area
- **seeding problems** – observing how various seeding methods work can lead to changes in farming practices for all involved. New seeding methods that result in better, more vigorous weed competitive crops can also be a benefit to the entire community.

"Calling the local crop specialist and getting together with neighbors to conduct a crop walk can really be beneficial," adds Byer. "Alberta Agriculture corp specialists are more than happy to be of help."

Contact: *Jay Byer*
(403)826-3388

4-H summer camp a journey to remember

Over the course of this summer, 300 4-H members embarked on a journey of self-awareness and fun at Alberta 4-H intermediate and junior summer camps

"Keeping with this year's summer theme, *Mapping Your World Through 4-H,* delegates at Intermediate camp (ages 12 to 14 years) travelled *Around the World in Five Days* via fun activities featuring Africa, South America, Australia, Antarctica and Canada," says Marguerite Stark, provincial 4-H programs specialist with Alberta Agriculture, Food and Rural Development. "4-H'ers participated in educational sessions led by staff and special guests featuring 4-H, agriculture, the environment and first aid. Intermediate campers were also treated to special opportunities such as an overnight camp-out, sports day, fashion show, a chili cook-off and the infamous *4-H 500*, a fun-packed relay event."

Junior campers (ages 9 to 12 years) took part in the theme *All about You and Your World* throughout their week at camp These delegates participated in small-group sessions on 4-H, agriculture, the environment and self-awareness. Some exciting activities at Junior camp included picnic lunches, watermelon carving, ice cream sculpting, talent show, campfire, sports, Capture the Flag and a carnival.

"Junior and intermediate camps are a fun and exciting experience for Alberta 4-H'ers," says Marguerite Stark. "Delegates can build relationships with youth from around the province while learning about themselves and the world they live in."

Union Pacific Resources, Nova Gas Transmission and Alberta Agriculture provide sponsorship for Alberta 4-H Summer Camps. Plans are already underway for the 4-H provincial camping program in 1999.

For more information on 4-H projects and programs, visit the Alberta Agriculture, Food and Rural Development web site at: **http://www.agric.gov.ab.ca/4h**

Contact: *Marguerite Stark*
(403) 948-8510

New draft irrigation legislation ready for public comment

Albertans can make their views known on the new draft legislation covering changes to irrigation districts and their governance under the Irrigation Act.

This legislation has governed irrigation districts in southern Alberta for the past 30 years. As part of the Government of Alberta's commitment to assess all provincial legislation, the Honourable Ed Stelmach, Minister of Alberta Agriculture, Food and Rural Development, appointed an MLA Review Committee in early 1997 to review the Irrigation Act. Ron Stevens, MLA (Calgary-Glenmore), Ron Hierath, MLA (Cardston-Taber-Warner) and committee chairman Glen Clegg, MLA (Dunvegan) conducted a thorough study and public consultation of the Irrigation Act . Their recommendations are contained in the recently released draft legislation.

"Among the many changes in the draft, the new legislation would give the irrigation districts greater autonomy in how they manage their affairs," says Clegg. "The districts would also be more accountable to their irrigators and other water users."

"Because the draft legislation has changed dramatically in both appearance and content, we have put together an interpretive guide to help the reader better understand what changes have occurred and where similar sections were located in the old Act," says Len Fullen, project manager for the review. "While legislation may not be leisurely reading, we want to ensure that the draft is well reviewed. We hope that the interpretive guide will help to make the reader more comfortable with the proposed changes."

To obtain a copy of the draft legislation, write to:

Len Fullen
Project Manager, Irrigation Act Review
# 301, J. G. O'Donoghue Building
7000 - 113 Street
Edmonton AB T6H 5T6

Telephone: (403) 422-2070
Fax: (403) 422-6540
E-mail: fullen@agric.gov.ab.ca

Written comments should be provided to the same address prior to September 15, 1998.

Contact: *Glen Clegg, MLA* *(403) 427-1806*
Len Fullen *(403) 422-2070*

"F" stands for Farm in the new AFAC name

The Alberta Foundation for Animal Care is now called **Alberta Farm Animal Care Association (AFAC).** The acronym, AFAC, will remain as is. The word Association will follow for business purposes.

"By using the word ***Farm*** instead of ***Foundation,*** we distinctively describe what the organization is and its purpose", says Peter Schuld, AFAC chairman. "As well as being a requirement of the Societies Act, the term Association well describes the organization as a group coming together for a joint purpose.

"We intend to increase AFAC's profile with both the rural and urban public. The livestock industry's progressive attitude towards responsible animal well-being is the message we want to deliver. This name change is a simple step to enhance this communication".

AFAC is funded by 130 livestock organizations, agribusiness and individual producer members. It's mandate is to promote responsible animal care. Since it's inception in 1993, AFAC has set up an *Animal Care Action Line and Resource Team* (ALERT), spearheaded Canada's first review of humane livestock transportation, co-developed a new province-wide 4-H program: Learning About Animal Welfare, co-developed a cattle handling and hauling training program and developed educational resources for schools.

AFAC's most recent accomplishment is a unique partnering with Alberta SPCA and Alberta Agriculture, Food and Rural Development to provide a coordinated approach to ensuring livestock protection in Alberta and to identify problem areas needing improvement. This working partnership is known as ALPS (Alberta Livestock Protection System).

Contact: *Ray Fenton*
(403) 427-4615

Agri-News Briefs

Watch nitrate levels in newly cut greenfeed

When cutting cereals for greenfeed or silage and there has been a frost, it's important to be aware of the potential for nitrate poisoning of stock. Usually if the frost is not too severe, three to four days is all that's required for the nitrate levels to be reduced to acceptable levels. Nitrate levels in the plant will be high if the plants are young or the field has been heavily fertilized. Most cereals at this time of year are advanced enough that nitrated levels shouldn't be a serious problem. Cereals harvested for silage do not usually have a problem as the level of nitrate is reduced by the fermentation process and diluted by the moisture present. For further information, contact Richard Guitard, cereals and oilseeds specialist with Alberta Agriculture, Food and Rural Development, Valleyview, (403) 524-3301.

Hey, Honey ... what's it all about

A new factsheet, ***Commercial Honey Industry***, is now available from Alberta Agriculture, Food and Rural Development. This agriculture business profile, Agdex 616/830-1, introduces honey production and marketing as a potential business opportunity. It is an overview that focuses on the key management issues in developing and operating a honey enterprise in Alberta. The Ag-Venture factsheet provides industry highlights, historical data and regulatory, production and marketing information. In chart form, it also includes capital investment requirements and operating cost breakdowns for different sized operations. *Commercial Honey Industry* is available from Alberta Agriculture district offices and the publications office, 7000 - 113 Street, Edmonton, AB T6H 5T6.

AESA Farm-Based Project Directory now available

A directory of the 1998/99 Alberta Environmentally Sustainable Agriculture (AESA) farm-based projects is now available. The AESA farm-based grants assist agricultural service boards, agricultural and environmental organizations, and Native groups to encourage practices that reduce agricultural impacts on the environment. A total of 589 projects across the province received $2,152,476 addressing this broad issue in 1998/99. In the directory, AESA farm based projects are listed by management issue and region. Each entry indicates the group doing the project, a contact name and number, a brief project description and location (if available). The management issues addressed are: manure management; livestock facility design and siting; sustainable grazing systems; riparian area management; responsible pest management; sustainable cropping systems; environmental liability; agriculture waste management (not manure); shelterbelts, agroforestry and woodlot management; comprehensive farm resource management and municipal resource management. The directory also provides summaries of percent funding by management issue. To receive a copy of the directory, call Therese Tompkins (403) 427-3588. The directory is also available on Alberta Agriculture's Internet site at **www.agric.gov.ab.ca/sustain/aesafarmbaseindex.html**

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51535 1266

Agri-News

August 17, 1998

Brand inspection discussion paper released

The public consultations on delegating brand inspection services to the cattle industry are set to begin. The Minister of Agriculture, Food and Rural Development, Ed Stelmach, announced today the release of the discussion paper on operating regulations as well as the schedule of public meetings.

"During the debate on Bill 41, I committed to a public consultation process on the regulations relating to brand inspection," says Stelmach. "Alberta Agriculture representatives will hold meetings with various producer groups and others interested in the process, to increase awareness of the proposed changes in the regulations required for delegation and give people the opportunity to make their views known."

The public is invited to attend the meetings. The schedule of dates and locations follows. All meetings start at 10:00 a.m. and should be finished by 12:30 p.m.:

August 10 – Grande Prairie, Provincial Building
August 12 – High River, Highwood Auction Mart
August 13 – Vermilion, Provincial Building

Stelmach leaves open the possibility that additional meetings may be scheduled in other parts of the province if there is enough interest. Bill 41, passed by the Legislature in May, provides for Stelmach to delegate the administration of brand inspection to the cattle industry. The Bill has not yet been proclaimed, as there are details to work out in the process of delegating the administration of Brand Inspection services to a new, not-for-profit industry partnership group called LIS.

The founding members of Livestock Identification Services (LIS) are the:

- Alberta Auction Markets Association
- Alberta Livestock Dealers and Order Buyers Association
- Alberta Feeders Association
- Alberta Cattle Feeders Association
- Alberta Cattle Commission
- Western Stock Growers Association

Cont'd on page 2

This Week

Brand inspection discussion paper released 1
Alberta Brand Service frequently asked questions 2
Profile of farm operators now available 3
Chafed by chaff rows? Even spreading is the key! 3
Fertilizer and water management in greenhouse crops 4
4-H members go the distance at Club Week '98 4
Infrastructure program assists with sustainable development 5
4-H members venture 'off the beaten path' at PDP '98 6
Agri-ville report complete 6
Briefs 7

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE FOOD AND RURAL DEVELOPMENT

The Western Stock Growers Association has recently expressed its intent to withdraw from LIS and the negotiations.

Copies of the discussion paper and the four Acts relating to brand inspection as well as the proposed regulations are available on the Internet, through Alberta Agriculture, Food and Rural Development's website. The address is: **http://www.agric.gov.ab.ca/brands**

For phone-in requests call (403) 422-7197 or fax request to (403) 422-9746. The Department would like to receive all written submissions by September 1, 1998.

Producers with questions regarding the proposed new brand inspection service may contact their LIS representatives for more information.

Contact:	*Ron Glen* *(403) 427-2137*	*Cliff Wulff* *(403) 422-6256*

Alberta Brand Service frequently asked questions

What Acts and regulations are being amended at this time?

The *Brand Act*, the *Livestock Identification and Brand Inspection Act*, the *Livestock and Livestock Products Act* and the *Stray Animals Act*.

Amendments to the related regulations and new delegation regulations.

Work is now ongoing to finalize the necessary amendments to the regulations and to conclude the negotiation of a delegation agreement.

What brand inspection functions does government currently perform, and which functions will be performed by LIS in the future?

Virtually all of the same functions performed by government will be continued by LIS. These include:

- Maintaining the Brand Registry.
- Inspecting all cattle and horses and some other livestock species for ownership identification at major points of sale.
- Issuing licenses to Livestock Dealers, Livestock Dealers' Agents, Stock Yards, and Stock Yard Operators, assessing applications, guaranteeing security and suspending or cancelling licenses as circumstances require.
- Handling and disposing of stray animals as outlined in the legislation.
- Appointing the Administrator under the *Livestock and Livestock Products Act*.
- Enforcing the four Acts and associated regulations.
- Providing advice and assistance under a number of other industry related Acts such as the *Livery Stable Keepers Act*, the *Line Fence Act*, the *Feeder Association Guarantee Act*, the *Livestock Diseases Act*, the *Animal Health Act* (Canada) and the *Criminal Code* (Canada).

The Minister of Alberta Agriculture retains responsibility for the related provincial acts and regulations, which provide the legislative foundation for the Service. This responsibility cannot be delegated.

Will clients notice any change in the services they receive now?

Initially, LIS expects very little change in the Brand Service. However, in the future, when LIS considers improvements to make the service more responsive to industry needs, it intends to consult with all segments of the industry. Any changes that require amendments to regulations will require the appropriate approvals of either the Minister or Cabinet.

Will there be any changes to Brand Service fees?

For delegated functions:

- Fees for existing services will remain the same for two years. Thereafter, LIS will be allowed to set fees below or to a maximum specified by the Minister in the regulations
- For other related services, LIS will make rules, subject to the Minister's approval, that could include fees
- For new activities, LIS will be able to set its fees at the levels it requires to provide efficient service

How will the Government ensure that the Service is operated in a fair and equitable manner for the benefit of the industry?

Government retains full responsibility for the Acts and regulations that outline how the delegated functions must be performed. Also:

- Appeal procedures and trust funds will be in place
- LIS reporting requirements will be specified in regulation and include the need for financial statements, operating reports, performance measure reporting, annual business plans and a periodic third party evaluation
- Government will maintain a small Secretariat to liaise with LIS and monitor its performance
- The Minister may revoke the delegation at any time with or without cause, and either LIS or the Province may terminate the arrangement with six months' notice

Profile of farm operators now available

A new publication, ***A Profile of Alberta Farm Operators and their Farms – 1996***, is now available from Alberta Agriculture, Food and Rural Development. Information on gender, age, hours of work, off- farm work, and farm type are included for 'at your fingertips' reference. It also contains historical data that show how these demographics have changed.

"Demography is the most powerful and most under-utilized tool we have to understand the past and forecast the future. Demographics play a critical role in a nations's economy and social life, and affect each one of us as individuals," says Dr. David Foot in his book *Boom, Bust and Echo: How to Profit From the Coming Demographic Shift*.

The more we understand about the demographics of Alberta's farm population, the better able we will be to help the industry adapt and change. Some of the highlights from the publication include:

- 82,455 farm operators manage 59,005 farms
- 26.5 per cent of operators are female; 73.5 per cent are male
- Average age of operators is 48.2 years. Average age of female operator is 46.4 years; average age of male operator is 48.9
- Since the 1991 Census, the number of women farming alone increased 33 per cent. In comparison, the number of men farming alone increased 1.8 per cent
- Since 1991, the number of operators under 35 decreased 19.1 per cent overall. The number of operators 70 years and over increased 24.4 per cent. This aging trend among farm operators reflects a similar greying trend among Canada's working population
- Women work fewer hours on the farms compared to men: 55.7 per cent of male operators work over 40 hours/week compared to 33 per cent of females. Even females farming alone report working fewer hours on the farms compared to males farming alone
- Half of all operators report off-farm work. This includes operators who receive payment for off-farm work (31.8 per cent) and those who operate one or more businesses other than their farm (17.8 per cent)
- There is an inverse relationship between participation in off-farm work and gross farm receipts. Over 80 per cent of all operators participating in off-farm work have total gross farm receipts under $100,000 (1995 dollars)
- Women and men are about equally likely to do off-farm work, but women tend to work fewer hours than men at paid off-farm jobs
- 49 per cent of the business operated by farmers are services such as accounting, machinery repair, bed and breakfast. Sales such as real estate account for 19 per cent, followed by construction (18 per cent)

A more complete picture of Alberta farm operators will be available in the fall when Agriculture Canada releases figures from the Agriculture-Census link. This will include education and occupation information, as well as family demographics

For a copy of *A Profile of Alberta Farm Operators and Their Farms – 1996* call Jean Wilson with the Agricultural Business Management Branch at (403)415-2146 or Chuanliang Su with the Production Economics and Statistics Branch at (403)422-2887.

Contact: Jean Wilson
(403) 415-2146

Chafed by chaff rows? Even spreading is the key!

Straw and chaff residues must be spread evenly in direct seeding systems. Uneven spreading can lead to equipment plugging, poor seed germination, nutrient tie-up and infestations of diseases, weeds or insects.

"The most practical way to manage crop residues is with a straw and chaff spreader on your combine," says Murray Green, provincial farm machinery specialist with Alberta Agriculture, Food and Rural Development, Airdrie. "Extra operations between harvesting and planting just to manage crop residues are time-consuming and costly.

"The amount and condition of straw and chaff at the back of the combine dictate the best choice of spreading and chopping equipment. Both straw and chaff must be finely chopped and evenly spread over the entire width of the cut."

For more information on crop residue management issues in direct seeding, see the following factsheets:

- Residue Management for Successful Direct Seeding, Agdex 570-4
- Equipment Issues in Crop Residue Management, Agdex 519-4
- Handling Difficult Crop Residue Conditions, Agdex 519-2

These factsheets are available at Alberta Agriculture district offices, the publications office, 7000 - 113 Street, Edmonton, AB T6H 5T6 or through the Alberta Agriculture Internet site: **http://www.agric.gov.ab.ca/agdex/500/index.html**

Contact: Murray Green
(403) 948-8525

Fertilizer and water management in greenhouse crops

Greenhouse crop production requires close attention to watering and fertilizing practices.

"Cucumber, tomatoes and peppers grown in sawdust may require up to 70 applications of water mixed with nutrients," says Dr. Mohyuddin Mirza, greenhouse crops specialist with Alberta Agriculture, Food and Rural Development's Crop Diversification Centre North (CDCN), Edmonton. "Computers are programmed to deliver between 100 to 150 ml of water per square metre of the greenhouse space when light is over 100 joules per sq. cm. On a sunny, hot day individual plants can receive up to six litres of water."

Highly soluble fertilizers, including nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, zinc, boron, molybdenum and chloride are delivered though a water drip system.

"It is quite a challenge to design a proper fertilizer program if a grower isn't familiar with various aspects of fertilizer management," says Mirza. "For example, it's important to know about dissolved minerals in water. If sodium level is over 100 ppm (parts per million) then the water quality for greenhouse irrigation is marginal."

How the nutrients are delivered to plants and the quantity of nutrients that need to be leached out from root zone depend on various factors like light, temperature and transpiration. All these factors are inter-connected with the crop growth and development.

"A basic understanding of fertilizer chemistry and the uptake of nutrients by plants is required to achieve above average fruit production," adds Mirza.

Similar water and fertilizer management practices are required for crops like chrysanthemums, poinsettia and bedding plants.

The greenhouse staff at CDCN has prepared a publication called ***Plant Nutrition and Fertilizer Management***, CDCN #98-GP-2. This 28-page publication discusses basic aspects of nutrient uptake by plants, the role of individual nutrients in plant growth and how to prepare a fertilizer program. This free publication is available by calling CDCN (403) 422-1789.

Contact:	*Mohyuddin Mirza*	*Muhammad Younus*
	(403) 415-2303	*(403) 415-2317*

4-H members go the distance at Club Week '98

The campus at Olds College came alive filled with 161 enthusiastic 4-H members on July 21-26. These 4-H'ers, ages 15 to 21 years, were in Olds to attend Provincial 4-H Club Week, an annual personal development program sponsored by Alberta Pool, United Grain Growers, Lammle's Western Wear, the Bank of Montreal and the Alberta 4-H Program Trust. This year's theme, *Go the Distance*, encouraged members to achieve goals and expectations while constantly striving to set new and better ones.

"The goal of Club Week is to encourage delegates to find a positive direction in life and develop the confidence and competence to pursue that direction," says Marguerite Stark, provincial 4-H programs specialist with Alberta Agriculture, Food and Rural Development. "Delegates are given tools to build a base from which they may venture out on the journey which is, essentially, the rest of their lives." 4-H members participated in small and large group sessions, activities and discussions that facilitated personal development and growth.

"Club Week is a life-changing experience for many of the delegates who attend," continues Stark. "The relationships and memories they take away from this program last for a lifetime." One of the highlights of Club Week '98 was the *Celebration of Overcoming Adversity* session, where delegates heard from five guest speakers. Veena Chandra, a Canadian woman from Red Deer spoke about overcoming challenges as an immigrant from India. Duane Daines, world-famous rodeo cowboy from Innisfail, shared his experience of beginning a new life after an accident that left him paralysed from the waist down. Sean and Robin Demko shared their incredible sense of humour with the delegates as they talked about the world of deafness. Ella Iantkow, accompanied by her husband Lou, talked about her experience as a person who is blind, and Laurel McCartney, a cancer patient from Calgary, shared her positive attitude and life philosophy with the delegates. McCartney is presently undergoing an experimental cancer treatment and has been given a limited time to live. Delegates were challenged and moved by the positive attitudes and motivational messages of the speakers.

Delegates were involved in organizing activities for one another throughout the program. 4-H'ers had fun facilitating and participating in such events as a talent show, masquerade dance, mini-Olympics, barbeque and banquet. Physical and leisure sessions were organized by the staff at the program, and encouraged delegates to relax and expend their physical and creative energy.

Cont'd on page 5

On Friday afternoon, delegates listened to motivational guest speaker Brenda Finley, television broadcaster, actress and international reporter. Through many shared experiences, Finley encouraged the delegates to believe in their dreams and trust their instincts. The banquet on Saturday evening honored the major sponsors of Club Week, and was attended by Dan Mulbach, Alberta Pool; Steve Murphy, Bank of Montreal and Mahlon Weir, 4-H Branch, Alberta Agriculture. Delegates were also able to meet with special guests from Kazakhstan at the formal banquet. The Hurricane Kumkol Munai Youth Ambassadors are in Canada for four weeks, accompanied by former Alberta 4-H'ers Rob Smith and Kyla Makowecki. Smith is in Kazakhstan to assist in the operation of farm owned by Hurricane Hydrocarbons of Calgary. Makowecki is there to launch a 4-H program for the local youth. As the guest speaker at the banquet, Smith encouraged delegates to map their life journey to a destination of happiness. Speaking from his own experience, Smith was an excellent example of how 4-H may help Club Week delegates *Go the Distance* in the future.

The week concluded with a special candle lighting ceremony, a reflective fantasy journey on the week's activities, and a first-time watching of the 1998 Club Week video. Plans are already underway for an exciting and challenging program in 1999.

Contact: Marguerite Stark
(403) 948-8510

Infrastructure program assists with sustainable development

Municipalities in Alberta have a new infrastructure program to assist with the treatment of wastewater for agricultural processing. Cabinet approved a new three-year, $35 million pilot program to be administered by Alberta Agriculture, Food and Rural Development. Funding will be provided from existing government resources.

"Municipalities want to take advantage of the opportunities for economic growth and expansion that result from agriculture processors locating in their communities," comments Premier Ralph Klein. "We believe the Alberta Advantage is even stronger than before, with the lowest overall tax rates, lower natural gas rates and a highly-skilled workforce. And now communities will have greater financial ability to improve their industrial water and wastewater infrastructure. As a former environment minister, I also know that this type of infrastructure is important to promote sustainable development."

The Premier, along with Alberta Agriculture Minister Ed Stelmach, made the announcement at the sod-turning ceremony for the new Lamb-Weston potato processing plant just outside Taber.

"Infrastructure is a basic requirement in a growing economy and provides a level playing field for businesses to create jobs, economic activity and wealth," says Stelmach. "Most people think infrastructure provides such essentials as hospitals, schools, roads, sewers for domestic and industrial use, power and water. This program will assist municipalities in the provision of basic services to agricultural processors who have chosen to locate or expand in Alberta. I'm pleased that the Municipal District of Taber meets the qualifications to take advantage of this program and is eligible for up to approximately $5 million from the Province toward the total wastewater infrastructure costs, estimated at approximately $15 million."

The new infrastructure program is called Municipal Industrial Wastewater Infrastructure for Agricultural Processing. Its purpose is to help municipalities invest in industrial water and wastewater infrastructure to accommodate new agricultural processing development, strengthen and diversify their economic base and facilitate major new investment in value-added agriculture processing in Alberta.

This program is a new initiative that will provide funding over a three-year period as follows: 1998/1999 - up to $10 million; 1999/2000 - up to $10 million, and 2000/2001 – up to $15 million.

Eligible applicants include all municipalities in Alberta, including cities, municipal districts, counties, improvement districts or special areas. Provincial funding will be capped at two tiers:

- maximum of one-third (33.3 per cent) of eligible infrastructure costs for smaller rural municipalities with a population under 30,000
- Maximum of 15 per cent of eligible infrastructure costs for municipalities with populations of over 30,000

Funding will only be made available to eligible municipalities that have already secured matching municipal and private sector investment. Infrastructure projects must be in excess of $2 million of capital costs.

Contact: Fay Orr
Director of Communications
Office of the Premier
(403) 422-4905 (office)
(403) 913-7371 (cell)
Ron Glen (403) 427-2137
Ron Popek (403) 427-3166

4-H members venture 'off the beaten path' at PDP '98

In the first of three programs this summer, 63 4-H members took part in the Alberta 4-H provincial program People Developing People (PDP) July 26 to 31. PDP is an exciting personal development program for 13 to 15 year olds, held at the 4-H Centre in Westerose, Alberta. Because of exceptional interest in the program this year, a third week of programming was added to accommodate over two hundred members throughout the summer.

"We are excited that new programming was added to PDP this year," explains Marguerite Stark, provincial 4-H programs specialist with Alberta Agriculture, Food and Rural Development. "Members participated in *Shell Canada Environmental Day* and *Lammle's Western Wear Personal Development Day*. These two days addressed specific issues that are relevant to the delegates' lives." Shell Canada Limited and Lammle's Western Wear are patrons of PDP, Alberta Pool is also a strong supporter of the program.

This year's theme, *Off the Beaten Path*, encouraged members to venture into unfamiliar territory and discover new things about themselves and the world around them. In sessions and group discussions, delegates were encouraged to be themselves and discover how interacting with others can encourage personal growth. Some of the activities and challenges at PDP included staged hearings on a current environmental issues, sessions on Alberta 4-H, Canada, self-awareness, peer pressure, communication, and many fun activities such as a talent show, dance, banquet, camp-out and outdoor games.

"PDP is an excellent opportunity for 4-H'ers to network with other members from around the province," adds Stark. "Small group discussions and large group activities help members grow in new skills and knowledge while building valuable relationships."

The excited 4-H members who attended the program in its first week in 1998 agree that PDP is an exciting and valuable experience they will remember long into the future. Plans are already underway for an exciting and challenging program in 1999.

For more information on 4-H projects and programs, visit the Alberta Agriculture, Food and Rural Development web site at: **http://www.agric.gov.ab.ca/4h**

Contact: *Marguerite Stark*
(403) 948-8510

Agri-ville report complete

Steppingstones Partnership Inc. of Edmonton has completed the final report on the pilot project Agri-ville: On-Line Farm Management Clubs. Agri-ville is an on-line farm management club initiated by the Canada/Alberta Farm Business Management Program (FBMP) that is designed to use Internet technology to create a virtual community. Agri-ville is located on the Internet at: **www.agri-ville.com**

"As of June 1998, Agri-ville had 952 members," says Craig Smith, FBMP representative. "This well exceeds the initial objective to have 200 members in the first pilot year. The project has been extremely successful with over 152,000 hits between March 18 and June 29, 1998."

The program evaluation shows some interesting demographics. About 75 per cent of the members are men in the 35 to 44 age category. A third had high school education, a third had a college diploma and a third had a university degree. Over half had farm revenues of $100,000 to $500,000. At the time the report was completed, 69 per cent of the members were from Alberta and the majority of the others were from Saskatchewan and Manitoba.

"The best achieved objective was enabling farmers to use the Internet as an educational, communications and marketing tool," says Smith. "Also very important to the members was the creation of an on-line community that provided easy access to experts and training. The evaluation showed that farmers are interested in access to timely information, the ability to ask other farmers and experts questions and the opportunity to 'chat' and exchange ideas."

Given the favorable response, Agri-ville is staying on-line for another year. Improvements to meet client needs and to increase the membership base are being made. This agricultural site offers an excellent source of timely information. For more information on Agri-ville, check the on-line site or call FBMP representatives Craig Smith (403) 626-3448 in Glenwood, Arla Trueblood (403) 954-3745 in Westlock, or Nan Bartlett (403) 835-4288 in Fairview.

Contact: *Craig Smith*
(403)626-3448

Agri-News Briefs

Peas that make the grade

A new factsheet produced by Alberta Agriculture, Food and Rural Development covers many of the strict guidelines for achieving top grade in green peas. The lowest grade for human consumption, Canada No. 2, requires that samples have no more than one per cent other classes (off-types or admixture) three per cent or less bleached seed and five per cent or less total damage with minimum earth tag. There are other quality factors used in green pea grading, but off-types, bleaching and earth tag are the three main standards that if not met, downgrade green pea samples to livestock feed. The market for green peas is relatively stable and Albertans who grow and harvest their crop with care can produce green peas that make the grade. Several production 'dos' and 'don'ts' are listed in ***Green Peas***. Copies of the factsheet are available at Alberta Agriculture district offices and at the publications office, 7000 - 113 Street, Edmonton, AB T6H 5T6.

Farm Family Awards 1998

This year marks the 30th anniversary of the Alberta Farm Family Awards. Recipients were judged on their farm (modern farming practices, farming self-improvement, farmstead appearance, family participation) and the family's work in and support of their community. The northern 1998 Farm Family Awards where sponsored by TELUS and Northlands Park. Acknowledge at a luncheon during Klondike Days in Edmonton, recipients this year, include:

- Earl and Sue Allen & Ward Allen and family, Jarvie
- Nick and Lillian Bezovie and family, Willingdon
- Paul and Francis Bogner and family, Berwyn
- Eric and Irene Boman and family, Valleyview
- Ken and Peggy Danyluk and family, Smoky Lake
- Bud and Esme Duncan and family, Rocky Mountain House
- Aaron and Audrey Falkenberg and family, Sherwood Park
- Andy and Leonie Frey and family, Peace River
- Michael and Mary Hayes and family, Worsley
- Joe and Elaine Kauffman and family, Tofield
- John and Linda Kirk and family, Abee
- Norman and Bonnice Lind and family, Cherhill
- Ken and Inga Lueck and family, Gwynne
- Will and Cheryl Marx and family, High Prairie
- John and Jean Milne and family, Fairview
- Morris and Linda Movald and family, Breton
- Terry and Shirley Nichols and family, Castor
- William and Nikki Nychka and family, Beaverlodge
- Raymond and Brenda Pare and family, Wainwright
- Victor and Albina Pasemko and family, Redwater
- Randy and Charlaine Pasemko and family, Redwater
- Dave and Jean Prichard and family, Killam
- Arnold and Ivy Pugh and family, Ponoka
- Peter and Emily Sanocki and family, Eaglesham
- Ken and Ruth Sarin and family, Edson
- Victor and Elsie Saskiw and family, Innisfree
- Ray and Kathy Shandro and family, Andrew
- Simon and Dorothy Tiemstra and family, Neerlandia
- Lillian Wallis and Sons, Fort Assiniboine
- Garry and Josie Webber and family, Stony Plain

During Stampede week, the Calgary Stampede Stock Show and the Bank of Montreal sponsored the southern Farm Families Awards. Farm Families acknowledged include:

- Jim and Betty Doenz and family, Warner
- Francis and Bonnie Gardner and family, Nanton
- Joe and Nancy Jeffray and family, Airdrie
- Arne and Erna Johansen and family, Carseland
- Louis and Jean Latimer and family, Olds
- Randy and Anne Luehr and family, Taber
- Elroy and Edith O'Hara and family, Foremost
- Gary and Delores Pearson and family, Delia
- Ken and Jean Pickett and family, Bassano
- Edward and Avis Robins and family, Blackie
- Barry and Sandy Schorr and family, Irvine
- Quentin and Anne Stevick and family, Pincher Creek
- David and Marie-Ann Takeda and family, Picture Butte

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51560 7840

Agri-News

August 24, 1998

Special crops into the 21st century

Speakers have been confirmed and leading edge topics finalized for **Opportunities and Profits II – Special Crops into the 21st Century**. The conference, at the Convention Inn in Edmonton on November 1 to 3, 1998, will offer those interested in crop diversification extensive ideas and networking opportunities.

Dr. Lyle Cracker, who has over 30 years of experience in the special crops area, will open the conference with a talk on *The Potential for Crop Diversification in the New Millennium*. Dr. Cracker is a professor at the University of Massachusetts teaching courses on herbs, spices and medicinal plants. He organizes a University Herbfest annually to highlight research in aromatic and medicinal plants. Research interests focus on essential oil synthesis and composition of several herbs. Other related interests involve natural products and their potential in the future.

"Dr. Cracker will set the stage for several of the speakers the first morning," says Dr. Stan Blade, special crops agronomist with Alberta Agriculture, Food and Rural Development. "Dr. Ernest Small from Agriculture and Agri-Food Canada will address the question *Why is Diversification Important for Canada?* A success story on diversification will be shared by Dr. Al Slinkard from the University of Saskatchewan."

Participants can select sessions from four different streams on Monday afternoon and Tuesday morning. Pulses, alternative crops and medicinal plants are the three main topics. The fourth choice covers a variety of topics: wildcrafting, potatoes, hemp and canary seed are some of the sessions offered in the stream titled the Next Millennium. A producer panel will share their special crops experiences on Tuesday afternoon to close the conference.

"The speakers include a good mix of producers, processors and researchers," adds Blade. "Industry displays and networking opportunities will give participants time for lots of informal discussion."

More information and registration brochures are available at any Alberta Agriculture district office, or call
Dr. Stan Blade (403) 422-1789, Wayne Goruk(403) 427-3122, or Kathy Lowther (403) 556-4220.

Contact: Dr. Stan Blade (403) 422-1789

This Week

Special crops into the 21st century 1

Alberta 4-H members venture to California 2

July, almost picture perfect 2

4-H horse enthusiasts province-wide attend Horse Classic '98 3

Day-neutrals, berry delicious 3

1998 4-H Project Fair a huge success 4

Briefs 5

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

Alberta 4-H members venture to California

From August 6 to 13, two Alberta 4-H members had the unique opportunity to take part in the 1998 4-H California Exchange, sponsored by the Canadian Imperial Bank of Commerce (CIBC). Kirk Clark of Fawcett and Shandra Ramsay of Bluffton were awarded the trip at the Provincial 4-H Selections Program in May. Clark and Ramsay were selected based on their leadership and interpersonal skills, community and 4-H involvement.

"Members benefit in numerous ways from 4-H exchange programs," says Marguerite Stark, provincial 4-H programs specialist with Alberta Agriculture, Food and Rural Development. "4-H'ers are able to learn about a different geographical area, network with members from California, build relationships, and experience a different culture."

The two delegates were treated to a send-off banquet on August 6, hosted by CIBC, then boarded their plane for Davis, California.

While in California, Clark and Ramsay attended the 1998 California 4-H Leadership Conference, August 7 to 9. As the only Canadian representatives at the conference, the two Alberta 4-H'ers joined California 4-H members and leaders in dynamic sessions on facilitation, accessing resources, games and various topics on leadership skills and strategies.

"The conference component of this exchange provides a unique opportunity for the delegates to bring skills in leadership and facilitation home to their own communities," continues Stark. "The fun, cultural experience of travelling to California, combined with the challenges of the conference, make for an extremely valuable experience."

For the four days following the conference, Clark and Ramsay were each hosted by a California 4-H family. They returned to their Alberta homes on August 13.

For more information on 4-H Programs and Projects, visit the Alberta Agriculture web site at:
http://www.agric.gov.ab.ca/4h

Contact: *Marguerite Stark*
(403) 948-8510
Shandra Ramsey
(403) 843-3747
Kirk Clark
(403) 954-3932

July, almost picture perfect

July started with near normal daytime temperatures, changing to above normal temperatures during the second week. Temperatures cooled to slightly below normal by mid-July The above normal temperatures returned for the last part of the month.

The Alberta provincial average temperature was 1.9 degrees above the 1961 to 1990 average of 16.7 degree C.

July temperatures ranged from slightly above normal to 3 degrees C above normal. All regions reported above normal temperatures. These averages are based on data recorded at 62 Environment Canada climate stations across Alberta.

"Growing degree day totals from April 1 to August 2 were about four weeks ahead of normal in the Peace, northwest and central regions, and about three weeks ahead in the southern and northeast regions," says Peter Dzikowski, agri-weather specialist with Alberta Agriculture, Food and Rural Development. "This suggests an early harvest with little concern about frost problems. Growing degree day totals are used for comparing the progress of a growing season to the long-term average and are useful for estimating crop development stages and maturity dates."

June and July are usually the wettest months of the year in Alberta. This July, the southern region reported above normal precipitation while all other regions reported near to below normal precipitation. Amounts of 20.8 to 164.4 mm, or 30 to 377 per cent of normal were reported. The Peace region and northwest region and eastern parts of the southern region were the driest parts of Alberta in July.

Claresholm reported the greatest precipitation departure with 164.4 mm or 377 per cent of normal. On the dry side, Whitecourt reported 31.6 mm of precipitation in July, only 30 per cent of it's long term average.

The provincial average July precipitation of 60 mm was 10.1 mm below the 1961 to 1990 average of 70.1 mm.

You can find more details at Alberta Agriculture's Internet site: http://www.agric.gov.ab.ca/navigation/sustain/climate/index.html

Contact: *Peter Dzikowski*
(403) 427-3594

4-H horse enthusiasts province-wide attend Horse Classic '98

With 120 members from 30 Alberta 4-H Light Horse Clubs and 75 volunteer leaders on hand, the 1998 Provincial 4-H Horse Classic was a resounding success. The annual event, now in its fourth year, continues to grow in popularity among 4-H members, parents and leaders. Many new faces and clubs were at this year's event.

"This program provided an exciting and challenging three days for the members and leaders in attendance," says Henry Wiegman, provincial 4-H agriculture specialist with Alberta Agriculture, Food and Rural Development. "The program focus encourages participation through 4-H members comparing horse knowledge, enhancing skills and socializing with other 4-H horse project members."

"The participation focus of the program plus the support from our two co-sponsors; Lammle's Western Wear and the United Farmers of Alberta, with patronage from Airdrie Trailer Sales Ltd., gave all attending 4-H Horse project members the opportunity to succeed," adds Wiegman.

Throughout the three-day program, members competed in teams and as individual in junior, senior and specific age categories. All members were entered in the Hipplogy class, a contest that tested members' knowledge and skill in five phases: knowledge stations, identification stations, conformation and performance judging, a quiz and team problems. The top four senior members in the Hippology contest are chosen each year to be part of the Denver Western 4-H Horse Classic Award Trip January 6 to 13, 1999. The trip is co-sponsored by Lammle's Western Wear and UFA. The four senior members who will represent Alberta at the international competition in Denver are: Christy Hoy of the Pembina North Light Horse Club, Shelli Paulson of the Rainbow Riders 4-H Light Horse Club (Stettler area), Kyley Johanson of the Lakedell 4-H Light Horse Club and Adelle Peterson of the Trochu Valley Riders 4-H Club.

Members also competed in an Illustrated Talk contest. In teams and as individuals, 4-H'ers showed exceptional demonstration skills and knowledge of equine subject matter. In the Horse Bowl contest, teams of members answered questions in a fast-paced and fun competition. On Friday morning, the marketing competition allowed members to demonstrate their communication skills in a simulated industry situation. Marketers tried to sell a specified horse to a panel of judges, drawing on their own knowledge and using provided information. The marketers at Horse Classic showed no lack of creativity and competence as many horses were "sold" throughout the few hours of competition.

Learning opportunities came in many forms throughout the program, beginning with Horse Industry Workshops. Participants heard from experts who gave demonstrations on ranch horses, dressage and jumping and endurance riding.

Horse Classic participants also had the opportunity to listen to guest speaker Bill Gordon of Forse Consulting Services, Fort Saskatchewan. Gordon gave a motivational talk entitled *May the Forse Be With You*. Speaking from his own experience, Gordon outlined key components to personal growth and success.

Horse Classic '98 concluded with an award ceremony that recognized the accomplishments of the participants, as well as the generous contributions of the sponsors and volunteers. Henric Ficner, United Farmers of Alberta, spoke to the members and leaders at the program, "UFA is proud to be associated with 4-H and programs such as Horse Classic. We believe this program and the members associated with it have a significant place in Alberta's future." Sincere appreciation was expressed by the organizers and attendees of the program to United Farmers of Alberta, Lammle's Western Wear, and Airdrie Trailer Sales Ltd. Plans are already underway for an exciting program in 1999

For more information on 4-H programs and projects, visit the Alberta Agriculture, Food and Rural Development web site at: **http://www.agric.gov.ab.ca/4h**

Contact:	*Henry Wiegman* *(403) 422-4444*	*Dwayne Grover* *(403) 782-5528*

Day-neutrals, berry delicious

Alberta is the largest producer of day-neutral strawberries in Canada with about 450 acres in production. Alberta's cool nights and the keen interest of market gardeners have enabled the growth of this sector of the strawberry industry. While many Alberta market gardeners grow both day-neutral and Junebearer types of strawberries, other provinces grow mostly Junebearer. These are available for only about three to four weeks in June and into July.

"With Junebearers, flower initiation is dependent on the short days of the previous fall and they fruit the following summer. Flower initiation in day-neutrals is not day-length dependent," says Judy Butt, promotions manager for the Alberta Market Gardeners Association. "They produce some fruit in the early summer, but warm summer temperatures slow down fruit production in July and early August. Berry production commences when temperatures are cooler again in mid- to late August."

Alberta market gardeners have planted day-neutral strawberries in response to consumer demand for berries all summer-long. There are usually just a few days between the end of the harvest for Junebearers and the start of the day-neutral harvest.

Cont'd on page 4

"Day-neutrals produce fruit from mid- to late August until after a couple of hard frosts," says Butt. "Depending on the year, day-neutrals can be picked as late as early October."

Day-neutral strawberries were first developed in California in the 1970's. Varieties such as Tristar, Seascape and Fern grow well in Alberta's late summer and fall climate and show higher sugar content as the nights get cooler.

"Another tasty bonus of late strawberries is their flavour and firmness," adds Butt. "That extra firmness makes for great jams and preserves that can be enjoyed months from now. And they're available when all kinds of fresh vegetables are ready for harvest. A trip to an Alberta market garden means getting strawberries and a variety of veggies in one easy trip!"

A list of Alberta's market gardens is available from all Alberta Agriculture, Food and Rural Development district offices, the publications office, 7000 - 113 Street, Edmonton, AB T6H 5T6 or by calling the Alberta Market Gardeners Association at 1-800-661-2642.

Contact: Judy Butt (403)826-1709

1998 4-H Project Fair a huge success

The second annual 4-H Project Fair, held at Olds College Campus July 29 to 31, was host to 36 4-H members and 15 leaders from across Alberta.

"The program was a huge success," says Lori McRae, 4-H resource development coordinator with Alberta Agriculture, Food and Rural Development. "Participants gained valuable experience and knowledge through mini-sessions, competitions and exchanging ideas with other 4-H members and leaders from around the province."

Project Fair, a part of provincial 4-H Project Congress, is a showcase of 4-H homemaking and non-livestock projects. Members contribute their 4-H projects to a bench show and competition, providing a colourful and interesting display throughout the three-day program. A highlight of this year's program was the Project Bowl, a fast-paced and fun competition that tested team members' knowledge of projects. Five 4-H members and one 4-H leader were also commended for doing independent demonstrations for the participants at the program. Fun activities at the program included a dance, pizza party and structured recreation.

"Mini-sessions at Project Fair were an excellent opportunity for members and leaders to learn about new project ideas and club activities," says McRae. "Excellent resource staff presented workshops and sessions on many topics: Agriculture and the Internet, Christmas in July, Entrepreneur, Gifts from the Kitchen, How to Build Beautiful Bones, Painting Techniques, Rope Making and Woodworking. All of the participants at Project Fair took new knowledge and fun ideas from the sessions back to their clubs for the upcoming project year."

In the concluding session at Project Fair, members were joined by all Congress participants to hear from keynote speaker Bill Gordon of Forse Consulting Services, Fort Saskatchewan. Gordon gave a motivational talk entitled *May the Forse Be With You*. Speaking from his own experience, Gordon outlined key components to personal growth and success.

"Project Fair combines fun activities, learning opportunities and friendly competition to create a valuable experience for the members and leaders who attend," continues McRae. "We are encouraged by the program's growth, and are optimistic about increasing participation and programming in 1999."

Project Fair is sponsored by Lammle's Western Wear, United Farmers of Alberta and the Alberta 4-H Program Trust.

Contact: Lori McRae
(403) 422-4H4H (4444)

Agri-News Briefs

Interested in growing hemp?

Alberta Hemp Symposia Proceedings, a new publication from Alberta Agriculture, Food and Rural Development, gives information from a cross-section of specialists on hemp production, processing and marketing. The book presents 17 papers that were given at two symposia held in Red Deer and Edmonton in the spring of 1998. Albertans interested in growing or processing low-THC industrial hemp will find this 85-page book helpful. It is said that fibre hemp could be Canada's answer to cotton. In Europe, this high-yielding crop is claimed to improve soil structure, suppress weeds and be free from disease and pest problems. Included in the publication are farmers' experiences over three years of farm trials; value-added opportunities for hemp processors; markets for industrial hemp; and, a look at some of the 50,000 products that can be made from hemp. Copies of *Alberta Hemp Symposia Proceedings* cost $10, plus GST, from the Publications Office, 7000 - 113 Street, Edmonton, AB T6H 5T6. To order by phone, call toll free 1-800-292-5697. Please add $2, plus GST, for shipping and handling for mail orders.

1998 Alberta Horticultural Congress

The 1998 Alberta Horticultural Congress and Prairie West Trade Show are being held at the Mayfield Inn on November 12 to 14, 1998. This conference for professional growers offers over 40 technical sessions. Topics include:

- marketing of Prairie fruit
- panel of Saskatoon berry growers discussing harvesting, irrigation, planting and fertilizing
- keynote speaker, Jeff Mowatt speaking on how to enhance service and retain customers
- *Prairie* xeriscaping *by Sara Williams*
- how to handle PYO operations
- meeting the needs of the wholesale buyers – Wayne Haryett
- starting a herbs or cut flower business and growing and marketing medicinal herbs
- high wire system for cucumbers – Simon Voogt, White Rock B.C.
- propagating native wood plants – Ken Wright

Programs for the 1998 Congress will be available in September. For further information, or to be added to the mailing list, contact Shirley Alton at (403) 415-2324.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51535 1381

Agri-News

August 31, 1998

Potato quality contributes to value-added processing

Growing high-quality potatoes for processing requires the best soil, irrigation water, large on-farm capital and operating investments, and intensive management. Alberta has all of these requirements and they contribute to Alberta's booming food processing industry.

"The high quality of processing potatoes grown by potato producers in southern Alberta was instrumental in attracting a world-scale potato processing plant to Alberta," says Clive Schaupmeyer, potato agronomist with Alberta Agriculture, Food and Rural Development, Crop Diversification Centre South (CDCS), Brooks.

Lamb-Weston, Inc., a ConAgra company, is building a state-of-the-art potato processing plant in southern Alberta. The ground-breaking ceremony was held on Friday, July 31 at the plant site 10 km east of Taber. Construction on the $100 million plant is underway and will be completed by the spring of 1999. The plant will produce frozen french fried potatoes and other related frozen products.

The new Lamb-Weston plant will have a short and long-term impact on Alberta's economy. In addition to the plant construction cost, potato producers in southern Alberta will spend between $20 and $25 million in the next year on new on-farm storages. And each year they will spend between $10 and $15 million on inputs to grow the potatoes for the new Lamb-Weston plant.

"Three companies already operate potato processing plants in Alberta," says Schaupmeyer. "Old Dutch Foods and FritoLay manufacture potato chips in plants in Calgary and Taber. Maple Leaf Potatoes produces frozen french fries and other frozen potato products at their Lethbridge plant. Several smaller processors make various potato products including dehydrated potato granules. When the new plant is operating, Alberta's potato processing plants will process between 300 and 400 thousand tons of raw potatoes annually with a farm-gate value of about $40 million. The estimated value of potato products processed in Alberta will be between $250 and $300 million annually."

Cont'd on page 2

This Week

Potato quality contributes to value-added processing 1

1998 ATB provincial 4-H judging competition 2

Deadlines for AARI research projects getting close 3

AARI research projects 3

Early harvest has its own problems 4

Does it pay to cover hay? 4

Briefs 6

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

Quality and yield are important for potato processors and growers alike. French fry processors require potatoes with high dry matter as they produce crisp, mealy fries with low oil content. Growers require high yields so they can pay for the huge investments and annual operating costs.

"Growing high yields of quality potatoes requires large capital and operational outlays," explains Schaupmeyer. "Potato equipment and storage buildings cost between $3,000 and $4,000 per acre of production. In addition to these investments are the costs of land and irrigation systems that range from about $1,500 to $2,500 per acre in southern Alberta depending on location, soil type and irrigation systems. New growers getting into potato production can reduce capital expenses by purchasing good used equipment, however, on-farm storages, which cannot be bought 'used', cost about $125 per short ton or about $2,500 per acre of production."

Cash costs vary from farm to farm and year to year, but range from about $1,200 to $1,600 per acre. These include annual costs per acre of about $200 for seed, $150 for fertilizer, $200 for pest management. Rent in the Taber area for potato land was about $250 to $275 per acre in 1998.

Expenditures don't ensure a high yield of quality potatoes. Field and storage management is intensive and small deficiencies in inputs or the incorrect decisions at many critical points can have a devastating affect on quality and yield. Three- and four-year rotations and top-quality seed reduce diseases. Adequate fertility and irrigation adds to both yield and quality. Weeds, insects and diseases can all ravage an expensive potato crop if allowed to flourish.

"To maintain growth and overall plant health, potato fields are closely monitored from the time plants emerge until they are killed by frost or foliage desiccants in the fall," adds Schaupmeyer. "Potatoes require uniform moisture levels that must be checked daily especially in the heat of summer when total weekly use can exceed 1½ inches (40mm) of water. Many sandy potato soils only contain about this much water in the root zone and growers typically irrigate twice each week with 3/4 inch (20 mm) each application during peak growth during hot weather. Most fertilizers are added prior to or at planting. However, to ensure uniform growth and adequate nutrient supplies for bulking, or tuber development, growers apply nitrogen fertilizers through their irrigation systems. Growers take tissue samples and soil samples every week or 10 days to monitor the nutrient levels so that fertilizers are not wasted or that the crop is never short of plant food. Based on the results of these tests, fertilizers are added through the irrigation water as required."

With the right management decisions and inputs, most growers can expect to harvest between 15 and 25 tons per acre of potatoes for processing.

Potatoes are processed right out of the field in summer, but from October to July or even August, potatoes for french frying must be stored in modern sophisticated storage buildings where temperature and humidity are precisely controlled. Contrary to common belief, protecting potatoes from frost is not a main concern of potato growers. But stored tubers are living organisms that breath and generate heat that must be dissipated by complex ventilation systems that control tuber temperature. Without adequate humidity, stored tubers shrink, which reduces quality and yield. High humidity increases the risk of condensation on the roof which can drip onto the crop and cause serious storage rot losses. Condensation is controlled with thick roof insulation and air flow.

Contact: Clive Schaupmeyer (403) 362-1314
Fax: (403) 362-1306
e-mail: schaupm@agric.gov.ab.ca

1998 ATB provincial 4-H judging competition

Olds College could hardly contain the excitement and enthusiasm of the 80 4-H'ers who gathered on campus for the Alberta Treasury Branches Provincial 4-H Judging Competition, August 7 to 9. "This is a very high-caliber competition," explains Henry Wiegman, provincial 4-H agriculture specialist with Alberta Agriculture, Food and Rural Development. "Members qualify to come here by judging livestock at the regional level. This means that all of the competitors are among the best young livestock judges in the province."

"The focus of this program is the development of skills that will make 4-H members successful in the livestock industry," continues Wiegman. "Members learn to make judgements on the quality of livestock, develop oral communication and marketing skills, make and defend decisions, practice written communication, and develop personal confidence." Unlike many competitions, 4-H Provincial Judging equips competitors before they enter the ring with instruction by official judges and industry experts. This year, participants had the opportunity to listen to seminars on judging sheep, swine, horses, dairy cattle, beef cattle, how to answer recall questions and how to give oral reasons. Competitors judged 13 classes in total, giving oral and written reasons on various classes of the five species. The delegates at the program impressed officials at the competition with the high quality of judging presented.

Sunday morning, an awards banquet concluded the competition. The top 17 judges at the ATB Provincial 4-H Judging Competition were chosen to represent Alberta at National and International judging competitions throughout the year. The Northern International Livestock Exhibition and the International 4-H Judging Seminar at Agribition in November, Denver Western Round-Up and Denver National

Cont'd on page 3

Western Stock Show in January of 1999 will all have representation from Alberta by the top judges from this program. Members were presented with their awards by Ray Montroy of Alberta Treasury Branches; Olds. This program was sponsored exclusively by Alberta Treasury Branches and hosted by Olds Agricultural Society.

Contact: Henry Wiegman
(403) 422-4444 (4H4H)

Deadlines for AARI research projects getting close

Submission deadlines for the Alberta Agricultural Research Institute (AARI) grant programs are quickly approaching. The provincial corporation enhances the contribution of the agriculture and food industry to Albertans through research and technology transfer.

"AARI coordinates and funds research conducted in the private sector, the universities and government research centres," said Dr. Ralph Christian, AARI executive director. "An average of $11 million per year flows through AARI in support of research and technology transfer efforts that benefit Albertans."

The benefits the industry receives from the research and new technologies are passed on to consumers who enjoy high quality, safe food. In addition, new employment and wealth are generated for Albertans.

AARI funds research with distinct emphasis on innovative projects aimed at increasing the global competitiveness and profitability of Alberta's agriculture and food industry, improving the environmental sustainability of the industry, developing new commodities and value-added products and generating scientific information and technology.

"We wouldn't be where we are today without the financial support of AARI," commented Kevin Kelly, controller at Quality Fast Foods in Edmonton. "Together with the researchers at the Leduc Food Processing Development Centre and the University of Alberta, we pioneered modified atmosphere packaging technology. This extended the shelf life of refrigerated sandwiches from five to 35 days." The research was conducted in the early 1990's and, since then, Quality Fast Foods has grown from 12 employees to close to 100. The company's product is shipped across Canada and the Pacific Northwest USA. Quality Fast Foods sandwiches are found in convenience stores, schools, and Price-Costco.

Aimed at developing new knowledge, technology and management practices that reduce the impact of the agriculture and food industry on the environment, the research component of the Alberta Environmentally Sustainable Agriculture (AESA) program is also managed by AARI. Applications for funding must be received by November 1, 1998.

The call for proposals for both the Farming for the Future Matching Grants and Direct Funding programs will go out soon with a deadline of November 1, 1998. The Matching Grants Program stimulates private sector support for agricultural research by offering to match funds contributed by private industry for approved projects. A recent study of AARI Matching Grant projects covering a wide array of agriculture commodities and resources showed that, for every taxpayer dollar invested in the research $78 is returned to Alberta. All the evaluated projects contained additional matching funds from private sector. The total funds amounted to over $2.3 million and this investment returned over $200 million to the agriculture and food industry and society.

Contact: Dr. Ralph Christian
(403) 422-1072

AARI Research Projects

In 1997/98, AARI funded close to 200 research projects under a diverse range of agricultural commodities and interests. These include beef and dairy; cereals and oilseeds; forage, pulse, vegetable and other crops; policy economics and marketing; pork, poultry, sheep and other livestock and resource conservation. A majority of projects are funded through matching contributions with industry. In addition, 114 on-farm demonstration projects were funded by AARI in 1997/98.

In 1998/99, 31 beef and dairy research projects are under way with help from AARI. Also funded through AARI are: 38 cereals and oilseeds projects; 38 forage, pulse, vegetable and other crops projects; eight policy, economics and marketing projects; 35 pork, poultry, sheep and other livestock projects; and 24 resources conservation projects.

The Alberta Agricultural Research Institute also commits funds directly to beef industry research, such as the Canada/Alberta Beef Industry Development Fund (BIDF) research program. The purpose of this program is to financially support projects that contribute to the improvement of beef production efficiency, profitability and long term sustainability of the industry. The due date for the last submission of pre-proposals for the BIDF program is October 15, 1998.

As well, AARI is responsible for managing the research component of the Canadian Beef Industry Development Fund (CBIDF), a national beef research funding program financed by the Canadian beef industry. Submissions for CBIDF were received July 31, 1998.The Value-Added Technology Transfer program supports the transfer of new technology or innovative products from research laboratories to Alberta's value-added

Cont'd on page 4

agri-food processing industry. Approved projects are funded on 50/50 cost-shared basis with industry partners. Applications are accepted year round.

The expected results of AARI's investment in research are advances in knowledge and technology that have the potential to improve industry productivity, income and employment, making a significant contribution to the prosperity and well being of Albertans.

Contact: *Dr. Ralph Christian*
(403) 422-1072

Early harvest has its own problems

The early harvest this year has caused a lot less stress for farmers. This doesn't seem to apply to everyone though. Even an early harvest brings its own set of decisions to make. After all the worries of getting the crop this far, a small error could wipe out much of the profit.

"Crop maturity, or when to cut is the most common question of the day," says Ron Hockridge, crop specialist with Alberta Agriculture, Food and Rural Development, Wetaskiwin. "Gauging crop maturity was expected for canola, but it appears to be a problem in cereals too. While no one can give a definite answer on the best time to harvest, there are some opinions.

"The biggest problem in canola this year stems from uneven emergence. Most of the canola crop was seeded earlier than normal. In many cases the seed was broadcast onto dry soil and harrowed in. Some canola germinated right away but most stands were thin and patchy due to the lack of spring rain. A decent rain three weeks later led to germination of seeds still in the soil and most canola fields filled out to adequate plant populations. These plants were three weeks later than the early emerging crop. They caught up to some extent but are probably still a week to ten days further away from the ideal swathing stage. Some fields did not finish filling out until the big rains started near the end of June."

The ideal stage for swathing is supposed to be when 30 to 40 per cent of seeds have started to turn colour. However, with Argentine varieties it's possible to swath at 10 to 15 per cent colour change if weather conditions dry the crop down slowly. For Polish varieties, 20 to 25 per cent colour change is more appropriate. For the fields with two stages of crop, it can be left until 40 per cent colour change on the early emerged plants before it looses too much from shelling. By that time, there should be 10 per cent colour change in the later crop.

"In these cases, a judgement on which end will create greatest losses needs to be made," says Hockridge. "It is probably not worthwhile waiting on the plants that germinated at the end of June because they are not likely to ripen in time.

"With cereal crops, the late growth of tillers is causing the most concern. Under dry conditions plants only put on the number of tillers they were able to support. When rain and better growing conditions came along, they developed more tillers. The two main factors to consider here are when the tiller started growing and characteristics of the variety being grown. Tillers that appeared on wheat the first week in July are unlikely to mature so it's better to cut these crops as soon as the main stems are ready. Wheats generally stand up very well and they do not shell readily, so it's possible to wait for some tillers to ripen. Varieties of barley with bent over heads can lose much of their yield if left too long. While it's alright to wait on a variety like Earl, Falcon should be swathed on time. It's important to know the variety to make the judgement."

Contact: *Ron Hockridge*
(403) 361-1240

Does it pay to cover hay?

In many areas of Alberta, this year's hay crop is coming in strong with yields as good or better than average. Markets are under speculation with prices still being established. Although there was some carry-over from last year, the demand by drought stricken farmers in the east will use up any extra feed grown in Alberta and this demand is good for prices.

"A question that producers need to answer for themselves is whether a bale shed or tarps for round bales are a justifiable expense," says Ken Ziegler, beef specialist with Alberta Agriculture, Food and Rural Development, Rocky Mountain House. "In a market of abundance, sellers need every possible edge to make a product attractive to buyers. This edge not only establishes a reasonable price but helps establish the sale. After all, a sale at market value is still better than no sale at all. It's the edge that is critical when marketing to a distant buyer who needs assurances on the condition of the hay being sold."

When hay is too plentiful, the possibility exists to keep hay over the winter into the following spring or for sale into the next year's feeding season. A hay stack then becomes an object of speculation. Is it better to sell now or hold out for a slightly better price? One question that must be asked is whether or not the quality of the hay can be kept so that the hay still has value to the buyer.

"In a year of feed abundance and being in a selling situation, the value of covering hay is immense," says Ziegler. "When considering the amount already invested in land, fertilizer, machinery and labor, the extra expense in covering the stack must be weighed against the significant dividends that could be realized."

Cont'd on page 5

The decision of whether to build a bale shed or use tarps also needs to be considered. Hay sheds are relatively major capital investments but, once built, can last for many years without repair costs.

"Bale sheds are also very convenient for machinery access for stacking or retrieving hay," adds Ziegler. "They are also very versatile for storing machinery, lumber or recreational equipment when not used for storing hay. Sheds can also be excellent tax write-offs in years of abundant income.

"Tarps, on the other hand, are versatile in their capital cost and the ability to change location of the stacks. They allow feed to be left in the field and still be covered. Tarps don't last as long as sheds but their per-ton-of-feed-covered cost is not as great. Cost savings need to be offset with the added labor of covering the stack each year and removing the tarps when accessing feed."

The short answer in this decision is that it does pay to cover hay for several reasons. Some of these reasons include:

- covering hay preserves it from rain damage;
- it allows producers to sell more feed after long-time storage;
- it puts the producer in a stronger selling position in times of abundant feed;
- it allows storing feed through a time of poor hay prices;
- it allows producers to command premium prices in the market place; and,
- it lets producers buy feed when the price is low and store it away for winter feeding.

"The majority of Alberta's feed hay is fed to beef cattle," adds Ziegler. "The issue of covering feed is critical to every cow-calf producer."

Contact: *Ken Ziegler*
(403) 845-8200

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51535 1506

Agri-News Briefs

Opportunities and profits...

Albertans interested in special crops can mark November 1 to 3, 1998 on their calendars. Alberta Agriculture, Food and Rural Development, in consultation with industry, has planned a **Special Crops Conference, Opportunities and Profits in the 21st Century**, that will be held at the Convention Inn, Edmonton. The goal of the conference is to inform participants about practical information related to the field scale production, processing, value-added and marketing of special crops. The conference is an opportunity to: learn about agricultural fibre possibilities and new crop innovations; explore commercial opportunities with native species of special crops; learn about opportunities in medicinal plant production and processing and other nutraceuticals; find out how to manage the information explosion; and, network with producers, marketers, processors and agri-business people. Conference registration fee is $125 prior to October 1, 1998 and $150 after October 1 (GST exempt). Make cheques payable to Alberta Agricultural Research Institute (AARI). Registration form and fee can be mailed to Alberta Agriculture, Food and Rural Development, Central Program Support, #306, 7000 - 113 Street, Edmonton, Alberta T6H 5T6. For further information, contact Wayne Goruk (403) 427-3122, Dr. Stan Blade (403) 422-1789 or Kathy Lowther (403) 556-4220. For toll free access in Alberta, dial 310-0000 first.

Toadflax control in direct seeding

Toadflax is a noxious weed in annual crops and pastures in Alberta. It is a perennial weed, spread by a creeping root system or by seed, that originated in the steppes of southeastern Europe and southwestern Asia and was probably introduced to the Peace River area in the 1920s as a contaminant in alfalfa seed. To provide information on this weed, a new factsheet ***Toadflax Control in Direct Seeding*** (Agdex 519-18) has been produced by Alberta Agriculture, Food and Rural Development. The factsheet, part of the Direct Seeding series, includes information on identifying the weed, control and prevention of toadflax. Copies are available free from all Alberta Agriculture district offices and from the Publications Office, 7000 - 113 Street Edmonton, AB T6H 5T6.

Farm Family Awards 1998 (correction)

During this year's Calgary Stampede International Stock Show, Minister of Alberta Agriculture, Food and Rural Development, Ed Stelmach, along with Mike Casey, Calgary Stampede director, and Pam Robertson, Alberta senior vice-president of the Bank of Montreal, presented the annual Farm Family Awards to 13 southern Alberta families. Southern Farm Families acknowledged include:

- Don & Judy Chapman, Lethbridge
- Ron & Donna Davis, Cowley
- Jim & Ann Geldreich, Bow Island
- James & Joan Graham, Brooks
- Hartley & Hannah McDonald, Vulcan
- Peter & Netta Huvenaars, Hays
- Clifford & Betty Larsen and Harvey & Marie Larsen, Standard
- Cecil & Joy Longson, High River
- Hugh & Betty Lynch-Staunton, Lundbreck
- Don & Elaine Moe, Morrin
- Mike & Tom Morkin, Claresholm
- Donald & Gayna Welsh, Milk River
- Daryl & Evelyn Winkler, Calgary

Agri-News

September 7, 1998

ALPS takes action in compromised farm animal issue

Overseeing the responsible and humane care of livestock in Alberta is the mandate of the new Alberta Livestock Protection System (ALPS). One of the first initiatives ALPS is focusing on is the issue of compromised livestock and the handling of these animals.

"A compromised animal is one that is injured, in poor health, weak or suffering debilitating conditions," says Dr. Ray Fenton, head of Animal Welfare for Alberta Agriculture, Food and Rural Development. "Good husbandry practices in Alberta have reduced the number of compromised farm animals, however, animals do become sick or injured. When addressing animal health, producers must act responsibly."

Under no circumstances are compromised animals to be marketed through nor transported to auction markets. These compromised animals should be humanely disposed of through appropriate channels available to producers.

Recommendations for the humane disposition of compromised livestock are in place in Alberta. The ***Codes of Practice for the Care and Handling of Farm Animals*** are available for all livestock and farmed deer. They outline recommended procedures for handling compromised livestock and are used as guidelines by enforcement agencies. Hogs, beef cattle, dairy cattle, veal calves, horses, sheep and poultry all have their own Code of Practice. Copies of these Codes can be obtained from the respective provincial livestock organizations.

Alberta's Animal Protection Act has recently undergone a major revision. The maximum fine for conviction under the Act was increased to $20,000. Alberta Farm Animal Care (AFAC), representing Alberta's livestock industry, supports this maximum penalty increase.

"Livestock producers will not ignore nor defend any inhumane treatment of the animals in our care," says Peter Schuld, AFAC chairman and dairy and beef cattle producer. "Responsible animal care is a priority for Alberta producers. This penalty increase is a reflection of this priority and the attitude of our rural communities."

Cont'd on page 2

This Week

ALPS takes action in compromised farm animal issue 1

Deadline extended for comments on Draft Irrigation Districts Act 2

Special crops the wave of the future 3

Greenhouse clean-up 3

Greenhouse problems to watch for 4

Advance planning for winter feeding 4

To swath or not to swath? 5

Farm machinery fires – a harvest hazard 5

Briefs 6

Coming agricultural events 7

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND

There are different degrees of compromise and producers must determine whether an animal can be salvaged. If the animal cannot be used because of food quality reasons or due to humane reasons, it should be euthanized on the farm. Slaughter options for animals that can be used include emergency slaughter on the farm/feedlot for very weak, downers, or animals with broken legs that should not be loaded; or transporting the live animal using special provisions directly to the closest licensed slaughter facility.

"When a producer has a compromised animal, a number of decisions must be made," says Fenton. "Some of the factors that must be considered are food safety, humaneness and economics. It makes no sense to transport and try to market an animal that has a condemnable condition. Guidelines are set up to help producers who find themselves with a compromised animal make the necessary decisions. Anyone who loads and transports animals is subject to federal and provincial livestock transportation regulations and are legally responsible for the animals being transported."

In Alberta, mobile butcher services are available to provide on-site slaughter service. This service provides another option for producers who have compromised animals that should not be transported. If an animal is butchered on-site, the meat and organs can only be used by the owner and immediate household, they cannot be sold.

"Under provincial policy, there is provision for killing an animal on the farm and selling the meat within the province, if done properly," explains Fenton. "In order for the meat from animals killed on-site to be eligible for sale, an antemortem inspection of the live animal by a veterinarian is required. This inspection must be carried out immediately prior to stunning. If the live animal passes antemortem inspection, it may then be stunned and bled.

"Bled-out animals must then be delivered by the owner or the mobile butcher service to a provincially licensed abattoir within 30 minutes from the time of stunning. Skinning, evisceration and post-mortem inspection must be done at the abattoir. A written, signed copy of the antemortem inspection, that includes time of inspection, stunning and bleeding, must accompany the carcass."

The livestock industry is growing in Alberta and humane treatment of livestock is a priority. ALPS is a pro-active initiative and clearly demonstrates the industry's commitment to animal care. It is a partnership of Alberta Agriculture, AFAC and the Alberta Society for the Prevention of the Cruelty to Animals (Alberta SPCA).

As the enforcement arm of the newly-created ALPS, the Alberta SPCA has recently hired three new constables. Their seven constables, located in Strathmore, Edmonton and Fairview, enforce the Animal Protection Act, investigating animal abuse, neglect and cruelty cases across Alberta. The constables will be increasing their inspection visits to auction markets across the province. The Alberta SPCA anticipates that future convictions for animal cruelty in Alberta will result in substantial increases in penalties.

ALPS was created in direct response to growing public and producer concern for an effective, accountable and coordinated province-wide program targeting animal care. Increasingly, animal welfare is becoming a trade issue. Alberta is a world leader in humane treatment of farm animals, a reputation livestock producers value highly.

Toll free numbers have been set up by AFAC and the Alberta SPCA to provide further information and to receive calls concerning farm animal health and care. Representatives of AFAC can be reached at 1-800-506-CARE (2273) and the Alberta SPCA number is 1-800-445-9003.

Contact: Dr. Ray Fenton (403) 427-4615

Deadline extended for comments on Draft Irrigation Districts Act

The September 15, 1998 deadline for comments on the proposed draft Irrigation Districts Act, which will govern the operations of irrigation districts, has been extended by the Minister of Agriculture, Food and Rural Development, Ed Stelmach.

"The deadline for comments is now October 15, 1998," says Stelmach. "Many people have indicated that harvesting operations have not allowed them to study the proposed legislation and make their comments known to the Department. We want to ensure that all comments and concerns of irrigation district board members, producers and the public are made to us before we proceed with the final draft."

This important legislation governs the operation of the 13 irrigation districts in southern Alberta. They service more than 1,250,000 acres of irrigated land and provide reliable water supplies to 48 communities and thousands of rural residences.

The draft legislation has been available to the public for review and comment since July 14, 1998. Introduced of a new bill is expected during the Spring 1999 Legislature Session.

"I want to be sure that interested parties have enough time to review this draft legislation and make their comments to us before we proceed to develop the final bill," adds Stelmach. "We want to ensure that the new legislation meets the needs of Albertans well into the next century."

Copies of the draft are available from Alberta Agriculture's Policy Secretariat (403) 422-2070. Government numbers are toll free in Alberta by dialing 310-0000 and then the number.

Contact: Ron Glen (403) 427-2137

Brian Colgan (403) 422-4596

Special crops the wave of the future

Twenty years ago bright yellow fields of canola made people ask "What's that?" Ten years ago acre upon acre of field peas aroused the same question. What will be the profitable crop in the 21st century? To get some insight into the answer to this question, plan to attend the **Special Crops Conference – Opportunities and Profits in the 21st Century.**

This conference will be held at the Convention Inn in Edmonton on November 1 to 3. You'll have an opportunity to hear producers, researchers and industry representatives share their ideas on future crop possibilities. You'll have time to see displays, and meet with other producers. You' ll hear some diversification ideas for your farm.

The conference begins Monday morning with several excellent speakers who will focus on potential crop diversification opportunities. On Monday afternoon and Tuesday morning you'll have a chance to focus on specific topics. If your interest lies in pulse crops, you can hear six speakers share their experience. Another stream focuses on medicinal plants. You can learn about botanical-based pharmaceuticals, ginseng, echinacea and what the buyers are looking for in medicinal crops.

Several sessions focus on spices in the Alternative Field Crops session. Learn what buyers are looking for world-wide or hear about the success of Spitz Sunflowers from owner Tom Droog. A variety of topics will be presented in the session titled The Next Millennium. Wildcrafting, dry beans, potatoes and canary seeds are a few of the topics. And if you think hemp will be the "canola" crop of the future you'll want to hear Stan Blade's talk on "Is There Hope for Hemp"?

New value added initiatives is one of the conference topics. How you assess the feasibility of a new venture will be presented by Kathy Lowther , a business development specialist. A panel discussion "Is Diversification an Option?" concludes the conference.

For more information on this conference, pick up a registration brochure at any Alberta Agriculture district office.

Contact: *Wayne Goruk*
(403) 427-3122
Kathy Lowther
(403) 556-4220
Dr. Stan Blade
(403) 422-1780

Greenhouse clean-up

As the autumn is getting closer it is the right time to start thinking about clean up in greenhouses. Sanitation is a very important element of the pest and disease prevention program. It is essential to minimize conditions that allow pests to enter greenhouses and survive from crop to crop

"When the crop is finished, remove plants from the greenhouse, clean up plant residues and dispose by burning, burying or hauling away," says Dr. Mohyuddin Mirza, greenhouse crops specialist, with Alberta Agriculture, Food and Rural Development, Crop Diversification Centre North, Edmonton. "The weeds that hide under the benches and escape detection are the major source of insect problems. Whiteflies and spider mites can easily survive and over- winter on those weeds and on twines and clips as well."

Starting new plants in a greenhouse with an existing crop should be avoided. If there is a high pest infestation, apply a pesticide to plants in the greenhouse before removing them – this will prevent spreading of pests to other greenhouses during removal process.

"Commonly recommended chemicals for crop clean up do not completely eliminate all the pests," says Kris Pruski, entomologist with Alberta Agriculture. "There are several factors that should be taken under consideration: temperature, strength of the product, wettability, action time, humidity and water quality. Very hard waters have alkaline pH and that may reduce the effectiveness of insecticides and pesticides. Washing the greenhouse with water and soap proved to be effective especially with high pressure jets. There are several chemicals which can be used for clean up including Dibrom, Thiodan, Diazinon, Lannate, DDVP. Remember to follow the proper rate (on the label). These chemicals have longer lasting residues and will strongly affect biological control agents. Please, allow enough time before introducing biologicals to your new plantings."

It has also been observed that an application of a 0.5% solution of household bleach or an ammonium compound i.e. Germex is very effective in cleaning. Caution: DO NOT MIX bleach and ammonia compounds - a hazardous chlorine gas may result. Use either bleach or ammonia separately. Virkon is another registered chemical for greenhouse cleaning between crops.

"Greenhouse operators should also remember to clean up irrigation lines," adds Jim Calpas, greenhouse crops specialist with Alberta Agriculture, Crop Diversification Centre South, Brooks. "The best cleaning solution is a diluted acid at a pH of two. Allow the solution to stay in the lines for 24 hours and then flush with water."

Contact: *Dr. Mohyuddin Mirza*
(403) 425-2303
Kris Pruski
(403) 415-2316
Jim Calpas
(403) 362-1312

Greenhouse problems to watch for

This year has probably been the worst on record for Lygus bugs in field crops, especially canola crops. Lygus bugs can also move into and become a problem in greenhouse crops, primarily cucumbers and peppers. Growers have also reported seeing them on chrysanthemums and other ornamental crops.

"Lygus bugs are comprised of a number of species of similar, but distinct bugs," says Jim Calpas, greenhouse specialist with Alberta Agriculture, Food and Rural Development, Crop Diversification Centre South (CDCS), Brooks. "The adults are about six millimetres long and three millimetres wide and range from pale green to reddish brown in color. They have a distinctive "V" shaped mark on the upper centre of their backs. Adult lygus bugs are good fliers and will quickly move and fly away when approached. Young lygus bugs (nymphs) are wingless and are light green in color."

Both adult and nymphs feed at the growing points of greenhouse crops by inserting their piercing and sucking mouthparts into the young tissue. Feeding damage may eventually kill the growing points of the plants. Feeding on pepper fruit can also cause deformed fruit.

"In past years, the incidence of lygus bugs in greenhouses has peaked during mid to late summer. Even this late in the season, growers should be on the look-out," says Calpas.

Late blight has been confirmed in commercial potato fields in Alberta. Greenhouse tomato growers should be aware that late blight, caused by the fungus Phytophthora infestans, can also infect tomato plants. There is the possibility that late blight spores can move in to greenhouse tomato crops from nearby potato fields or even garden potato plots.

"Late blight is usually a disease that does well under cool, wet conditions," says Calpas. "However, some aggressive strains have adapted to hot, wet conditions and this is apparently the type of late blight that Alberta potato growers are faced with this year."

The first symptoms on tomato plants are irregular, water-soaked, green-black spots on the edges and tips of older leaves. Under humid conditions these areas expand rapidly causing the collapse of the leaflets and leaves. Fruit infection can also occur as green-brown, water soaked spots spread across the surface of the fruit.

"It is also time to take note of tomato fruit cracking problems," says Dr. Mohyuddin Mirza, greenhouse crop specialist, Alberta Agriculture, Crop Diversification Centre North (CDCN), Edmonton. "Fruit cracking is generally due to irregular watering practices and when watering is started when the plants are not actively transpiring."

If you notice any of these types of symptoms occurring in greenhouse crop, contact the CDC South (403) 362-1300 or CDC North (403) 422-1789 in Edmonton, as soon as possible.

Contact:	*Jim Calpas* *(403) 362-1312* *Kris Pruski* *(403) 415-2316*	*Dr. Mohyuddin Mirza* *(403) 415-2303*

Advance planning for winter feeding

When it comes to a winter feeding plan, the benefits of early planning are many.

"Most producers think about how much feed is going to be needed to carry a herd through an Alberta winter and plan accordingly," says Brian Koberstein, intensive livestock operations engineer with Alberta Agriculture, Food and Rural Development, Barrhead. "Taking the next step beyond that is where benefits to an operation come in."

There are a few questions that, asked early can put producers in a position to capitalize on opportunities in the marketplace. For instance knowing:

- how good is the feed on hand?
- where will different classes of roughage or grains best be used?
- is there an opportunity to market surplus or high quality feed?
- is there a need to purchase supplemental feeds:
- are there alternatives to supplemental feeds that could be considered?

"Knowing the quality of feed early enough to manage it properly is a huge benefit," says Koberstein. "It can mean that hay with a higher protein level can be targeted into a post-calving ration or that some straw can be rationed in when using this high quality hay on dry cows. This situation can even allow for some feed to be sold.

"The same can be said if testing shows that hay quality is poorer than expected. Supplemental feeding or mixing in grain ensures that a cattle herd can maintain good condition throughout the winter."

It is easy to fall into a 'feeding rut'. Evaluating the winter program should be done annually. While it takes a little time, being prepared for the winter feeding period early is always a positive step to take.

"The overall feeding period goal is to meet production goals as efficiently as possible," adds Koberstein. "The chance of achieving this goal increases as the awareness of feed quality, quantity and price increases. Both over-feeding and under-feeding can be avoided."

Contact: *Brian Koberstein* *(403) 361-1240*

To swath or not to swath?

With the variability in field maturity within a field this year, the big question is what to do with canola crops. Swath early and take advantage as the first flush of the crop matures, and hope the rest matures along with it? Wait for the later maturing plants and hope the more mature seed stays in the pod? Look at preharvest weed control? Let the crop stand and straight combine?

"This year, it's important to look at crop stages and potential of each - the first thing is to get a good assessment of what each crop is like and the proportion in each stage," says Jay Byer, crop specialist with Alberta Agriculture, Food and Rural Development. "Get out of the truck for this check. It is easy to be misled both ways by the color of the field this year, so the evaluation must be done by opening some pods. Very often a crop that's turning color will still be full of only green seeds, but it can also be that fields where the plants look green have good seed change in the majority of the crop."

Get right into the field and start opening pods of the various stages of the canola. Open pods through the entire main stem of Argentine or Polish canola. Polish seeds tend to mature the same throughout the stem; Argentine will mature faster at the bottom than at the top of the main stem.

"An Argentine canola plant that is ready to swath will have good color change on the seeds at the bottom of the main stem, roughly one third of the seeds with at least a touch of color change on the middle third of the main stem, and the top could have all green, but hard seeds," says Byer. "The standard recommendation is that the field should be started slightly earlier than this stage, so that the majority of the crop is cut at the right stage of maturity. Look at plants in all the various stages of maturity to help make the swathing decision."

The potential of each stage must be evaluated. With a variety of maturity stages in the field, decisions are sometimes a challenge. This is where the color of the field is important Once maturity is assessed, the proportion or percentage of the plants that are at each stage must be determined. Within a single field, the color of the plants indicates the relative maturity, however, the color that indicates ripeness can vary considerably from field to field. To get some idea of the yield potential of each stage, consider the pods on the main stem and the amount of branching. This should be an indication of which stage has the most yield potential. That is the stage producers should try hardest to keep.

"To look for the proportion of each stage, drive around the perimeter of the field, and look for the proportion of each stage through the whole area," adds Byer. "Knowing the proportion of each flush and the potential yield of each flush helps when making decisions on how many flushes can be reliably expected to get into the bin."

Polish tends to last longer before shelling out, but is more susceptible to alternaria. This means that waiting to catch the last maturing plants may not always be a paying proposition Be aware that swathing a crop that is too green may reduce seed size, cause some green seed problems in extremely hot weather conditions and cause potential downgrading. If there is too much green crop in the field, waiting to avoid grade reduction may be necessary.

"Really late plants within an otherwise mature crop will not make seed and may increase the time it takes the swath to dry down," says Byer. "The seeds will likely shrivel up and will be blown out the back end of the combine. Waiting for them will likely only result in losses in the rest of the crop and would only be worth waiting for if they are by far the majority of the crop and there is a good chance of them maturing before frost hits."

A frost would lock in the remaining chlorophyll and has the potential to reduce grade. Preharvest weed control may help speed dry down time, especially if there are lush weeds in the crop. Preharvest weed control will also help when straight combining a crop, a practice becoming more common in Polish canola. Producers are also trying this harvest method in Argentine without too much yield loss, provided the crop is even and well knitted together.

Contact: *Jay Byer*
(403) 826-3388

Farm machinery fires – a harvest hazard

Recent weather in the province has for the most part been hot and dry. While this means that harvest season started a little early this year, it also means that conditions are right for combine fires.

"Each year, farm equipment fires cause millions of dollars in damages in Alberta and most of these occur during the harvest season," says Solomon Kyeremanteng, head of Alberta Agriculture, Food and Rural Development's farm safety program. "When conditions are dry, grain dust and chaff can easily build up in tractor or combine motors. These highly combustible products can and do result in equipment fires. Awareness and preparedness are the key to making sure that an equipment fire doesn't get out of control."

Most equipment fires begin in the engine area. Almost half of the reported machinery fires are caused by mechanical or electrical failures or malfunction, including short circuits and worn parts. But it is agricultural products (such as straw, hay, grain, chaff) that are most often initially ignited. Electrical insulation and combustible or flammable liquids and gases are ranked the second and third most commonly ignited materials in farm machinery fires.

Cont'd on page 6

Observing some routine precautions can give Alberta farmers a safety edge against equipment fires:

- check combine and tractor wiring to ensure there are no worn electrical connections;
- be sure that all equipment is in good repair;
- worn or damaged bearings should be replaced
- worn or damaged v-belts should be replaced
- when refueling, shut off the engine and allow a hot engine to cool – use this time to check on chaff and grain dust build-up
- do NOT smoke when refueling farm machinery
- remove the gas cap slowly and fill the tank with care
- avoid overfilling the tank
- have a 10 B:C fire extinguisher within reach, preferably mounted on the tractor or combine
- dry-chemical extinguishers are most effective for out-door use
- a second extinguisher should be located just inside the door of any building near fuel tanks
- for good all-around fire protection, a tri-class 2A-10 (or 20) B:C extinguisher should be considered

"Farm safety is a year-round goal," adds Kyeremanteng. "Taking a few moments to do simple safety checks, timing breaks to coincide with re-fueling to allow hot engines to cool down, are just a couple of things that could make a big difference to farmers in Alberta this harvest season."

Contact: Solomon Kyeremanteng
(403) 427-4227

Agri-News Briefs

Farm woodlot opportunities

The theme for the 1998 Prairie Woodlot Meeting is Farm Woodlot Opportunities. The meeting is scheduled for September 23 and 24, 1998 in Portage la Prairie, Manitoba. Focus will primarily be on the economic benefits to farm producers, micro forestry contractors and the farm community. The meeting, open to anyone interested in woodlot management and agro-forestry, is a casual forum where landowners, government and non-government organization representatives, provincial woodlot associations, consultants and private forestry delivery agencies can share experiences and insights. The agenda includes provincial reports from Alberta, Saskatchewan and Manitoba and a micro-forestry contractor panel discussion. The planned field tour includes stops at four micro forestry operations, including hardwood and softwood woodlots, mills, a coal fired kiln and examples of Manitoba native wood products. Registration fee is $20 per person. For further information, contact Shane Tornblom, field manager, Manitoba Habitat Heritage Corporation, (204) 522-8733.

Rural electricity information seminars

The Alberta Federation of REAs Ltd. (AFREAs) and the Alberta Association of Municipal Districts and Counties are presenting information seminars in Grimshaw – September 15, Edmonton - September 17 and Red Deer – September 18. The seminars will provide details of how the new Provincial Electricity Restructuring Legislation will affect rural electricity consumers. The morning session is presented by the Department of Energy and covers legislation as it applies to electrification associations and rural consumers. Afternoon sessions cover the business aspects of the rural electrification associations and a session providing information on the provision of electricity supply to rural consumers. Cost of the seminar is $10. To register, contact AFREAs before September 8, 1998 at (403) 417-3396.

Coming agricultural events

September, 1998

Stock Dog – Australian Cattle Dog Specialty & Herding Trials
September 1 - 3
Quickheels Ranch & Kennels Reg'd
Savona, B.C.
Fee: Herding Clinic $22/dog, Seminar $20
Contact: Meaghan Thacker
Quickheels Ranch
Phone: (250) 373-2389

Western Food and Beverage Show
September 16 - 17
Vancouver, BC
Contact: Meteor Show Productions
Phone: (416) 229-2060

Fall Harvest Show and Sale
September 20
9:00 am - 5:00 pm
Ukrainian Cultural Heritage Village
East of Edmonton
Contact: Ukrainian Cultural Heritage Village
Phone: (403) 662-3640

1998 Prairie Woodlot Meeting – Farm Woodlot Opportunities
September 23 - 24
Portage la Prairie, Manitoba
Contact: Manitoba Habitat Heritage Corporation
Phone: (204) 522-8733

City Slickers' Harvest
September 24
9:00 am - 3:30 pm
Big Springs Road, Airdrie
Contact: Betty Gabert
Phone: (403) 427-4225 Fax: (403) 422-7755

October, 1998

Poultry Service Industry Workshop
October 8 - 9
8:00 am - 12:00 pm
Kananaskis Lodge
Kananaskis
Contact: Narine Singh
Phone: (403) 415-0827 Fax: (403) 427-1057

Thanksgiving Harvest Festival
October 10
9:00 am - 5:00 pm
Blooming Prairie, Edmonton
Contact: Blooming Prairie
Phone: (403) 431-1451 Fax: (403) 433-6440

Agriculture and Food Week
October 12 - 16
Alberta
Contact: Bard Haddrell
Phone: (403) 427-5312

Northeast Ag Expo
October 17 - 18
11:00 am - 4:00 pm
Ag Corral and Curling Rink Lobby
St. Paul
Fee: $50.00/livestock pen; $25.00 for a value-added table
Contact: Morley Kjargaard
Phone: (403) 645-6301 Fax: (403) 645-2848

Hostex '98
October 18 - 20
Toronto, Ontario
Contact: Canadian Restaurant and Food Services
Phone: (416) 923-8416

Agriculture Tax Update for Professionals
October 19, 8:30 am
Stockade Convention Centre
5521 - 49 Ave
Lloydminster
Fee: $170 until Oct 2, $195 after Oct 2
Contact: John Melicher, REDA
Phone: (403) 451-5959 Fax: (403) 452-5385

Agriculture Tax Update for Professionals
October 20, 8:30 am
Lethbridge Lodge, 320 Scenic Drive
Lethbridge
Fee: $170 until Oct 2, $195 after Oct 2
Contact: John Melicher, REDA
Phone: (403) 451-5959 Fax: (403) 452-5385

Product Distribution Solutions for Rural Processors
October 20, 9:00 am - 3:30 pm
St. Stephen's Catholic Church – Parish Hall
Lacombe
Fee: No fee. Pre-registration is required before October 13
Contact: Alberta Agriculture, Lacombe
Phone: (403) 782-3301 Fax: (403) 782-5514

Introductory Risk Management Using Futures & Options (For Husbands & Wives)
October 21 - March 10, 1999
6:30 pm - 9:30 pm
Lethbrige
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Agriculture Tax Update for Professionals
October 21, 8:30 am
Coast Plaza, 1316 32 St NE, Calgary
Fee: $170 until Oct 2, $195 after Oct 2
Contact: John Melicher, REDA
Phone: (403) 451-5959 Fax: (403) 452-5385

Farm Estate/Transfer Planning Workshop and Resource Fair
October 22, 9:30 am - 3:45 pm
Falher
Phone: (403) 836-3351 Fax: (403) 836-3529

Farm Estate/Transfer Planning Workshop and Resource Fair
October 23, 9:30 am - 3:45 pm
Grimshaw
Contact: Margurite Thiessen
Phone: (403) 836-3351 Fax: (403) 836-3529

Farm Estate/Transfer Planning Workshop and Resource Fair
October 24, 9:30 am - 3:45 pm
Grande Prairie Provincial Bldg.
Grande Prairie
Contact: Margurite Thiessen
Phone: (403) 836-3351 Fax: (403) 836-3529

Agriculture Tax Update for Professionals
October 27, 8:30 am
Grande Prairie Inn, 1163 Clairmont Rd
Grande Prairie
Contact: John Melicher, REDA
Phone: (403) 451-5959 Fax: (403) 452-5385

Agriculture Tax Update for Professionals
October 28, 8:30 am
Convention Inn, Edmonton
Fee: $170 until Oct 2, $195 after Oct 2
Contact: John Melicher, REDA
Phone: (403) 451-5959 Fax: (403) 452-5385

Agriculture Tax Update for Professionals
October 29, 8:30 am
Holiday Inn, Red Deer
Fee: $170 until Oct 2, $195 after Oct 2
Contact: John Melicher, REDA
Phone: (403) 451-5959 Fax: (403) 452-5385

November, 1998

OPPORTUNITIES & PROFITS II – Special Crops into the 21st Century Conference
November 1 - 3
Convention Inn, Edmonton
Contact: Wayne Goruk
Phone: (403) 427-3122 Fax: (403) 427-5921

Native Plant Summit IV – Native Plant Production
November 2 - 4, 7:00 pm - 4:30 pm
Sheraton Cavalier Hotel, Calgary
Contact: Heather Gerling
Phone: (403) 427-4658 Fax: (403) 422-4244

Farm Accounting Using Quickbooks
November 4 - 19, 6:30 pm - 9:30 pm
Lethbridge
Fee: $195.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Farm Business Management & Analysis
November 6 - February 1, 1999
9:00 am - 4:00 pm
Lethbridge
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Fall Focus 98
November 10
Camrose Regional Exhibition, Camrose
Contact: Rosemary Snider
Phone: (403) 855-2286

Saskatchewan Pork Industry Symposium
November 12 - 13
Saskatoon Inn, Saskatoon, Saskatchewan
Contact: Wendy Hayes
Phone: (306) 933-5078 Fax: (306) 933-7352

Red Deer International Agri-Trade
November 12 - 15
Westerner Park, 4847A - 19th Street
Red Deer

Alberta Horticultural Congress/Prairie West Trade Show
November 12 - 14, 8:00 am - 12:00 pm
Mayfield Inn, Edmonton
Contact: Shirley Alton
Phone: (403) 415-2324 Fax: (403) 422-6096

Annual General Meeting – Flower & Herb Growers Association of Alberta
November 14, 9:00 am - 5:00 pm
Mayfield Inn, Edmonton
Contact: Trace Johnston, president FHGAA
Phone: (403) 448-1722

Farm Accounting Using Quickbooks
November 24 - December 1
6:30 pm - 9:30 pm
Cardston
Fee: $195.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Farm Accounting Using Quickbooks
November 24 - 26, 9:30 am - 4:00 pm
Pincher Creek
Fee: $195.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Model-it: Application of Modelling as an Innovative Technology in the Agri-Food Chain
November 29 - December 2
Wageningen, Netherlands
Phone: +31.317.49 02 85 Fax: +31.317.41 85 52
E-mail: MODEL-IT@ATO.DLO.NL

December, 1998

Farm Accounting Using Quickbooks
December 1 - 18, 9:30 am - 4:00 pm
Vulcan
Fee: $195.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Western Canadian Grazing Seminar
December 2 - 3
Mayfield Inn, Edmonton
Contact: Lorene Cunningham
Phone: (403) 443-7544

Farm Accounting Using Quickbooks
December 2 - 4
9:30 am - 4:00 pm
Taber
Fee: $195.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Alberta Barley Commission Annual Meeting
December 2 - 3
Capri Centre, Red Deer
Contact: Mona Carder
Phone: (403) 291-9111 or 1-800-265-9111

Farm Accounting Using Quickbooks
December 7 - 16, 9:30 am - 4:00 pm
Claresholm
Fee: $195.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Farm Accounting Using Quickbooks
December 9 - 11, 9:30 am - 4:00 pm
High River
Fee: $195.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Farm Accounting Using Quickbooks
December 9 - 11, 9:30 am - 4:00 pm
Foremost
Fee: $195.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396
January, 1999

Farm Succession Resource Fair
January 2, 1999
10:00 am - 3:00 pm
Provincial Building, Medicine Hat, Alberta
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Land & Crop Management Using Precision Farming Software (Farm Trac)
January 7 - 21, 1999
9:00 am - 4:00 pm
Lethbridge
Fee: $185.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Alberta Horse Breeders and Owners Conference
January 8 - 10, 1999
Capri Centre, Red Deer
Fee: $75
Contact: Les Burwash
Phone: (403) 948-8532

Banff Pork Seminar
January 12 - 15, 1999
6:00 pm - 1:00 pm
Banff Centre, Banff
Fee: $165.00 plus gst, before Dec. 15, 1998, $215 after (1998 rates, subject to revision)
Contact: Ms. Aileen Reilly
Phone: (403) 492-3236 Fax: (403) 492-9130

Seed Plant Convention
January 14 - 16, 1999
Westin Hotel, Edmonton
Contact: Bill Witbeck
Phone: (403) 782-4641 Fax: (403) 782-5514

Farm Succession Resource Fair
January 14, 1999
10:00 am - 3:00 pm
Animal Husbandry Building
Lethbridge, Alberta
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Farm Accounting Using Quickbooks
January 14 - 22, 1999
9:30 am - 4:00 pm
Medicine Hat
Fee: $195.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Focus On Agriculture Conference
January 15 - January 16, 1999
6:00 pm - 4:30 pm
Kinsmen Community Center, Ponoka
Contact: Joyce Crandall
Phone: (403) 783-5777 Fax: (403) 783-5776

Agriculture and Food Council – Leaders Challenge Conference
January 22 - 23, 1999
1:00 pm - 5:00 pm
Capri Centre, Red Deer
Contact: Jean Wilson
Phone: (403) 415-2146 Fax: (403) 427-5220

Farm Machinery Economics
January 26 - February 9, 1999
9:00 am - 4:00 pm
Animal Husbandry Bldg.-L.C.C.
Lethbridge
Fee: $165.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Alberta Branch CSGA Annual Meeting
January 27 - 29, 1999
Westin Hotel, Edmonton
Contact: Bill Witbeck
Phone: (403) 782-4641 Fax: (403) 782-5514

Advance Farm Accounting
January 28 - 29, 1999
9:00 am - 4:00 pm
Lethbridge
Fee: $155.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

February, 1999

Farm Accounting Using Quickbooks
February 10 - 24, 1999
Evening course, 6:30 - 9:30 pm
Lethbridge
Fee: $195.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Farm Accounting Using Quickbooks
February 10 - 12, 1999
Three full days, 9:30 am - 4:00 pm
Lethbridge
Fee: $195.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Farm Machinery Economics
February 15 - 23, 1999
9:00 am - 4:00 pm
Taber
Fee: $165.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

Advanced Precision Farming Course Using Farm Trac & Farm Site

February 25 - 26, 1999
9:00 am - 4:00 pm
Animal Husbandry Building, Lethbridge
Fee: $200
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

March, 1999

Land & Crop Management Using Precision Farming Software (Farm Trac)

March 1 - 8, 1999
9:00 am - 4:00 pm
Taber
Fee: $185.00
Contact: Bradley Smith
Phone: (403) 223-7907 Fax: (403) 223-3396

August, 1999

Agriculture Institute of Canada Annual Conference

August 8 - 10, 1999
University of Prince Edward Island
Charlottetown, P.E.I.
Contact: Kais Deelstra
Phone: (902) 368-4842 Fax: (902) 368-4857

September, 1999

XXXVI International Apicultural Congress

September 13 - 18, 1999
Vancouver Trade and Convention Centre
Vancouver, B.C.
Contact: Apimondia '99Coming agricultural events notice

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51570 9661

Coming agricultural events notice

1. Do you know of any provincial (Alberta), national or international agricultural meetings, conferences or conventions coming in 1998, 1999 or 2000?

2. Please state the **name** of the event(s):

3. **When** is the event being held?

4. **Where** is the event being held? Include city or town; hotel or convention centre, if known:

5. Please give **name, city or town, and phone number** of a **contact person** for each event listed:

6. This form has been **completed by** what organization? Please include your phone number:

Please return this form by November 22, 1998 to:

Lee Anne Palutke, Agri-News Editor
Communications Division
J.G. O'Donoghue Building
7000 - 113 Street
Edmonton, Alberta T6H 5T6
Phone: (403)422-6958
Fax: (403)427-2861
E-mail: palutke@agric.gov.ab.ca

"*Coming agricultural events*" is published quarterly in Agri-News.
The next list will be December 7, 1998.

Agri-News

September 14, 1998

First pulse harvest survey

The pulse industry in Western Canada is expanding rapidly. From 300,000 acres in 1990 to 2.7 million acres in 1998. And exports have risen along with the production. Canada is the world's largest exporter of feed peas and lentils. As production expands, provincial grower organizations and the Canadian Grain Commission recognize the need to sample and analyze pulse crops right off of the combine.

This need is being answered by the initiation of the ***Pulse Harvest Survey for the Prairie Provinces***. The survey will give the trade and the domestic buyers a very accurate picture of the quality of our crop each fall.

"The grain industry has been conducting comprehensive sampling for a very long time. The pulse industry is newer and this comprehensive survey will give traders and hog producers a yardstick to measure the quality of prairie pulse crops," says Janette McDonald, general manager of the Alberta Pulse Growers Commission. "There had never been a mechanism to sample, collect and test crop from all different regions of the prairies before. Now the pulse industry will have documented, detailed information to give to customers about the characteristics of pulse crops each year."

As well as an expanding domestic livestock feed market, there is excellent export potential of pulse crops. The survey will provide a documented average across the Prairies that give protein, grade, digestible energy and lysine on composite pea samples. Lentil samples will provide the grade, seed size distribution and the cooking times on composite samples.

"Alberta and the other prairie provinces produce clean, high protein pulse crops," says McDonald. "The survey will help pulse growers convince hog producers that peas and pulse crops are excellent feed. For right now, the main goal is to capture an increased share in the domestic livestock feed market."

Documenting the quality standard of pulse crops across the prairie provinces starts at the farm. For this first survey, 1,000 pea growers and 500 lentil growers from across the prairies were asked to fill in sample boxes and send them in to the Canadian Grain Commission lab in Winnipeg, Manitoba.

Cont'd on page 2

This Week

First pulse harvest survey 1

U of C offers certificate program for agri-business development 2

Starting a new greenhouse business 2

To till or not to till 3

4-H delegates participate in international affairs seminar 3

Weighing the worth of ingredients 4

Crop storage 4

Briefs 5

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

To encourage participation in Alberta, all farmers who return their pulse samples will have their name entered to win a travel certificate for $200.00 from Carlson Wagonlit Travel.

"We're anticipating that 200 farmers from across Alberta will send in their crop samples," says McDonald.

By the end of November of each year, a comprehensive representation of the quality of pulse crops for that year will be available to farmers.

Contact: Janette McDonald (403) 986-9398

U of C offers certificate program for agri-business development

An Agri-Business Development Certificate program sponsored by Royal Bank of Canada, Meyers-Norris-Penny and Canada/Alberta Farm Business Management Program (FBMP) is being offered this fall. The program, for business advisors, is being held in conjunction with the Centre for New Venture Development, Faculty of Management, University of Calgary.

"Designed to guide participants through a comprehensive business development and technology commercialization process, the program is based on real-life projects the students bring with them," says Doug Barlund, business development advisor with Alberta Agriculture, Food & Rural Development. "This program is offered at the University of Calgary and includes six days of in-class work, plus work on a major project during the intervals between class days."

Participants will work through the process using a case study or business development project, and at the end of the program have completed a business plan. There will be an opportunity for participants to present their final plan to a business review panel for critiquing.

"The real advantage is that participants get an appreciation of what it's like to be an entrepreneur going through the process and selling ideas to bankers or investors," adds Barlund. "The program is open to anyone involved in business development, but particularly those who are providing advisory services to emerging entrepreneurs and small business enterprises."

The first in-class module begins October 21 to 23, 1998. A subsequent module begins December 3 and 4, 1998 and concludes February 19, 1999. The program is supported by FBMP, Royal Bank, Meyers Norris Penny and Alberta Agriculture, Food and Rural Development. Registration $500.00 per person. Accommodation, travel and meals are extra.

Contact: Janice Atwood
(403) 220-7877
wlong@acs.ucalgary.ca.
Doug Barlund
(403) 556-4245
barlund@agric.gov.ab.ca

Starting a new greenhouse business

Every year, more than 200 enquiries to start a greenhouse business are received at the Crop Diversification Centres North and South (CDCN & CDCS).

"About 30 'would be growers' will actually visit the specialists and about eight of those will actually build greenhouses," says Dr. Mohyuddin Mirza, greenhouse crops specialist, CDCN, Alberta Agriculture, Food and Rural Development, Edmonton. "The growth rate of the greenhouse industry has been between four and seven per cent during the past decade."

Going into a greenhouse crops production and marketing business requires a certain amount of knowledge in many areas of greenhouse construction, maintenance, plant raising systems, environmental control systems, irrigation technology, plant management and many other related areas.

"To begin with one must prepare a business plan which may be a very simple write up of what the operator wants to do," says Mirza. "It's important to understand the market demand and gross revenue potential of various crops, operating and production costs and cash flow projections."

"Some production schedules of greenhouse grown vegetables have a strong influence on cash flow projections," says Jim Calpas, greenhouse crops specialist, CDCS, Brooks. "One can start harvesting seedless cucumbers in 60 days from seeding while tomatoes take 100 to 110 days and peppers take about 130 days. Furthermore, producers must provide a break between crops so that the greenhouse can be sanitized to reduce insect and disease infestations."

Greenhouse design has undergone several changes over the past decade. The trend is to build high-roof greenhouses with natural ventilation, a design that makes it easier to maintain optimum temperature and relative humidity levels.

What crops to grow is another challenge. The greenhouse program has several publications on economics, crop management, sources of material and supplies, including:

- Greenhouse Bedding Plant Production and Marketing – AGDEX 281/830-1
- Bedding Plants Production Guidelines – CDCN-GP-1
- Plant Nutrition and Fertilizer Management – CDCN-GP-2
- A Summary of Greenhouse Crops in Alberta – CDCN-GP-4
- The Making of a Successful Greenhouse Project – CDCN-GP-5
- Cost Analysis of Greenhouse Cucumber and Tomato Production – Agdex 821-66

These publications are available from the Crop Diversification Centre North, Edmonton.

Contact:	*Mohyuddin Mirza*	*Jim Calpas*
	(403) 415-2303	*(403) 362-1312*

To till or not to till

Fall tillage is a long standing practice in Alberta. It has been used to manage residues, incorporate herbicides, prepare a seedbed for next spring, apply or incorporate fertilizer, control weeds and bury disease carrying residue. Some believe tillage is required to open up soils to enhance moisture infiltration.

"There are good reasons to reduce or eliminate or at least minimize fall tillage," says Allan Howard, soil moisture specialist with Alberta Agriculture, Food and Rural Development's Alberta Reduced Tillage Initiative (ARTI), Lethbridge. "Fall tillage dries the soil and knocks down stubble, reducing snow catch. If planning to apply fertilizer, consider a knife or coulter opener to minimize soil disturbance and stubble knockdown, and then direct seed in the spring. Direct seeding systems increase snow catch and leave a residue mulch that protects the soil from exposure to sun and wind when there is no snowcover. Soil moisture levels are better under direct seeding systems because evaporation is reduced and melt from captured snow increases reserves in the spring."

Along with increased soil moisture, direct seeding systems increase organic matter, increase soil organisms, reduce input costs, reduce labor inputs, increase cropping options and conserve energy. There are also several studies that show that direct seeding results in comparable, if not better, yields than conventional tillage systems. Over the long term, reduced tillage from direct seeding improves soil tilth and that results in better infiltration and less runoff to collect in those low areas.

"Research has shown that soils tilled in the fall are drier than untilled fields come springtime. Opening up the soil exposes a much higher surface area to air," adds Howard. "That not only results in more drying but it can speed up organic matter decomposition. Excessive fall tillage leaves fields with inadequate residue to capture snow and prevent wind and water erosion. With no cover, the soil surface is exposed to more wetting and drying. The combined effect of exposing more soil to air and to wetting and drying leads to crusting of the soil surface. In addition to making a difficult seedbed, crusted soils have higher runoff, meaning less rain and snowmelt can be stored in the soil for crop use. Once crusts have formed, farmers feel that they have no option but to till to break it up and this compounds the problem. There is a growing amount of research results to show that zero-till and direct seeded systems have improved crusted soils."

Tillage also destroys macropores created by earthworm activity. Jill Clapperton of the Lethbridge Research Station has observed higher numbers of earthworms in zero tillage systems. Leaving residues on the surface feeds and increases earthworm populations. Earthworms are thought to play a major role in reducing the incidence of common root rot. They also increase organic matter cycling in the soil and improve soil tilth.. Better water infiltration results.

If planning to reduce or eliminate fall tillage, be sure to review all aspects of the system, including residue management, fertilizer application, weed control, seeding equipment and rotations. Switching to a direct seeding system requires careful thought and planning, the further ahead the better. Discuss the decision with other farmers who have tried it, check with one of the ARTI agronomists and talk to as many knowledgeable people as possible.

"When switching to a direct seeding or reduced tillage system, be prepared to look for long-term benefits," concludes Howard. "Sometimes it can take three to four years to really see the benefits, but most direct seeders agree that they are worth it."

Contact: *Allan Howard* *(403) 381-5861*

Peter Gamache *(403) 427-3361*

4-H delegates participate in international affairs seminar

Two Alberta 4-H members were given the opportunity to attend the annual Seminar on the United Nations and International Affairs (SUNIA) at the Goldeye Centre near Nordegg, Alberta. The seminar was held in two sessions during August. Ian Horner of the Sturgeon Clever Clovers 4-H Club and Christy Wahl of the Telbot Sharp Edges 4-H Club were chosen to attend the seminar at the Provincial 4-H Selections Program in May. Delegates were selected based on their leadership abilities, interpersonal skills, community involvement and 4-H experience.

Horner and Wahl joined more than 130 high school students at SUNIA for a week filled with fun, recreation and learning. Delegates were given the unique opportunity to investigate political, economic and social issues with diplomats from the United States, Canadian Foreign Affairs and International Trade.

"Simulations of Security Council hearings, group examination of international affairs and the opportunity to network with youth from across Western Canada make SUNIA an unforgettable experience," says Marguerite Stark, provincial 4-H programs specialist with Alberta Agriculture, Food and Rural Development.

Beyond the exceptional educational experience at SUNIA, Horner and Wahl participated in an exciting recreational program that included canoeing and hiking in the Rocky Mountains, a fun international bazaar night and other group activities. The SUNIA award trip was made possible by sponsorship from Calgary Exhibition & Stampede.

Contact: *Marguerite Stark* *(403) 948-8510*

Christy Wahl *(403) 578-2025*

Ian Horner *(403) 973-6205*

Weighing the worth of ingredients

If food processors are only as good as the ingredients they use, then sourcing and using ingredients are basic to the production side of their business.

"The goal of a processor is to produce the same top quality product every time," says Janice McGregor, rural development specialist - business with Alberta Agriculture, Food and Rural Development, Morinville. "But that may be a challenge if availability of ingredients changes with the seasons. For example, if locally grown fresh fruits and vegetables are used – what happens during the rest of the year? Are frozen or canned ingredients an option, or should imported ingredients be considered?"

It's important to use the same specific ingredients to maintain quality and consistency. If a certain brand of canola oil is used, use it all the time. Changing brands or types of oil may also change the product's flavor.

Scaling up a home recipe to a commercial batch can cause complications in either the recipe – a change in ingredients – or in finances – buying large quantities.

"Be precise. A scale may be the best investment made," says McGregor. "Its benefits include improved product consistency, lowered costs and improved inventory control as well as adhering to government regulations."

A scale is only one piece of equipment a processing business may need. Determine what is needed before equipment is bought. Equipment suppliers have good selections of new and used equipment or if buying equipment is out of financial reach, it may be possible to rent or lease space in a commercial kitchen.

"Equipment, ingredient and supply issues are all in the spotlight of the Northwest Processor's summer issue," adds McGregor. "This free quarterly newsletter, put together by Alberta Agriculture, Food and Rural Development specialists, links rural processors with research, technology and information."

For more information about the food processing industry, or to get on the Northwest Processor mailing list, contact McGregor at 939-4351 (toll-free via 310-0000).

Contact: Janice McGregor
(403) 939-4351

Crop storage

On first look, it appears that there should not be any problems with crop storage this year. A good stretch of dry weather lately, means most of the crop should come off dry. But, experience indicates that appearances could be deceiving. Crops have spoiled in other years when harvesting conditions appeared ideal.

"Heating in crop storage bins can start in two ways," says Ron Hockridge, crop specialist cereals and oilseeds, with Alberta Agriculture, Food and Rural Development, Wetaskiwin. "First, the grain is still living so it respires and produces heat naturally. At higher temperatures respiration is faster so there is likely to be more activity in a grain that was put up hot at the outset. Secondly, there are usually weed seeds, pieces of plant and various contaminants in crops when they're harvested. These unwanted materials may be higher in moisture and start the process going. Insects and fungi that feed on the grain and contaminants also respire, giving off heat.

"Moisture rebound in crops after they go into storage, is a subject that producers talk about. This is explained in various ways, but it is safe to say that moisture may increase in the bin. It will also be higher in some areas of the bin than in others. These pockets become hot spots for biological activity. The problem seems to be worse in steel bins than in wooden bins that breathe, but it can happen in any storage facility."

Deterioration in storage is a higher risk in some crops than others. Fine seeds with little room for air movement between them tend to be of greater concern. Looking at the moisture content where the crop is considered dry is a good guideline for estimating relative risk.

"In a year such as this one, farmers can do a couple of things to ensure the safe storage of their crops," adds Hockridge. "Monitoring bins should be done often in the first few weeks to catch any problems at the beginning. If possible, aerate the grain to make sure it is both dry and cool for long term storage."

Several fact sheets that provide information on moisture and temperature suitable for grain storage are available at Alberta Agriculture district offices and at the publications office, 7000 - 113 Street Edmonton, AB T6H 5T6, including:

- Factors Affecting Deterioration of Stored Grain – Agdex FS 732-11
- Solar Grain Drying – Agdex FS 736-9
- Grain Drying with Natural Air – Agdex FS 736-12
- Movement of Natural Air Through Grain – Agdex 736-11

"I'm sure everyone is pleased with the good harvesting conditions at an early stage this year. Now it's important to minimize the hidden risks that can accompany these conditions," says Hockridge.

Contact: Ron Hockridge
(403) 361-1240

Agri-News Briefs

Food processing safety video

A new 26-minute video, ***Safe Food Practices for Small Processors***, outlines the basics of good manufacturing practices and gives a number of steps processors can follow to ensure their product is safe. Food safety should be a main concern for any company producing a food product. When marketing food to the public, a processor must make sure the product looks and tastes good and, most importantly, is free from contamination. The information contained in the video is especially suited to emerging businesses selling product at farmers' markets or into the specialty food market. The video provides instruction on how to prepare, handle and package food safely and on how to store food properly. The video can be ordered from Alberta Agriculture, Food and Rural Development, publications office, 7000 - 113 Street, Edmonton, AB T6H 5T6, or by calling toll free 1-800-292-5697. Cost of the video is $35 plus GST. Please add $2 plus GST for shipping and handling.

The Alberta Horticultural Congress

The 1998 Alberta Horticultural Congress is being held at the Mayfield Inn and Suites on November 12 to 14, 1998. The sponsoring associations are the Landscape Alberta Nursery Trades Association, the Alberta Greenhouse Growers Association, the Alberta Market Gardeners Association, the Fruit Growers Society of Alberta and the Flowers and Herb Growers Association. The congress sessions are finalized and 50 technical speakers fill the three-day agenda. Running in conjunction with the Congress is the Prairie West Trade Show that will feature 220 booths for professional growers. Congress programs are being mailed out to professional growers in September. For further information or be added to the mailing list, call the Alberta Horticultural Congress at (403) 425-2324 and leave a company name, address and phone number.

Conflict resolution is a learned skill

Journey to Consensus is a 30-minute video that comes complete with a 39-page process guide. Knowing how to set the tone for negotiation; establish a mutual agenda; set out the task; identify common interests; develop options and reach consensus are all skills considered and discussed in this educational package. The video and process guide walk through an interest-based negotiation model that uses a multi-party, land use, conflict scenario. Various negotiating skills and techniques are identified to help managers and participants hone the necessary skills should they ever be in a conflict resolution situation. The video and guide are also helpful training tools for people teaching interest-based negotiation. The package is available from the Alberta Agriculture, Food and Rural Development publications office, 7000 - 113 Street, Edmonton, AB T6H 5T6, or by calling toll free 1-800-292-5697. Cost of the package is $50 plus GST. Please add $2 plus GST for shipping and handling.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51594 8160

Agri-News

September 21, 1998

Safeguarding Alberta's Elms

The American elm tree (*Ulmus americana*) is the most popular shade tree in Alberta and well adapted to the harsh climate. Many people are surprised to learn that the American elm is not native to Alberta although it is in Saskatchewan and Manitoba.

"Elm trees have been good for Alberta, often making up 50 per cent of the urban trees," says Janet Feddes-Calpas, Dutch Elm Disease Prevention Coordinator with Alberta Agriculture, Food and Rural Development.

The elm tree has been under attack throughout Europe and North America. Dutch Elm Disease (DED) and the insects that spread the disease, the smaller European elm bark beetle (SEEBB) and native elm bark beetles (NEBB), have been responsible for virtually wiping out these beautiful trees in some areas. The elm tree has found sanctuary in Alberta and, to date there has not been a confirmed case of Dutch Elm Disease in the province. However, this disease is running rampant in Saskatchewan and Montana, and many believe that it is only a matter of time before DED starts killing Alberta's elms.

"All is not doom and gloom when it comes to saving the Alberta elms against this deadly disease," says Feddes-Calpas. "A prevention program involving an elm tree maintenance program, monitoring for the beetles, DED surveillance, an elm inventory and increasing public awareness can minimize elm tree losses. Experience in Great Falls, Montana and Winnipeg, Manitoba has shown that although they have been battling the disease for the last 10 to 20 years, with a good prevention program in place they have managed to keep their annual elm losses down to one to two per cent."

The front line of Alberta's elm defence is a cooperative effort between Alberta Agriculture's Dutch Elm Disease Initiative, based at the Crop Diversification Centre South, Brooks, and STOPDED, (Society To Prevent Dutch Elm Disease). This non-profit society is made up of Alberta's provincial and municipality staff, nurserymen, landscapers, arborists, research scientists and concerned Albertans.

"The Alberta Agriculture Dutch Elm Disease Initiative (DEDI) prevention program monitors Alberta's border crossings to prevent elm wood from entering the province," continues Feddes-Calpas. "DED and the elm bark beetles can hide in elm firewood, and once in Alberta, will attack our elms. Elm wood

Cont'd on page 2

This Week

Safeguarding Alberta's Elms 1

Changes to Alberta's Water Act 2

Students and sheep flock to school 2

Agricultural use for industrial by-products 3

Y2K – the new bug to watch for 4

Briefs 5

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

must not be transported or stored. In addition, the prevention program is involved in an extensive public awareness campaign to educate Albertans about the threat of Dutch Elm Disease and what can be done to prevent.

STOPDED crews are also active throughout Alberta taking inventory of Alberta's elms. This inventory identifies where the elm trees are located, and what condition they're in. A healthy elm is less likely to become a target, as elm beetles prefer to initially search out weak trees to breed in. It's estimated that Alberta's elm trees are worth a staggering $500 million!"

DED and the beetles that spread the disease are declared pests under the *Alberta Agriculture Pest Act* and there are guidelines outlining the proper procedure for removal and disposal of dead elm trees. There are also guidelines for handling living elm trees.

"Elm bark beetles are attracted to fresh cuts on pruned elm trees like flies to honey, and if the beetles are carrying DED, the end result is disastrous for the elm," adds Feddes-Calpas. "Once infected with the fungus the elm tree will die. To minimize the chance that bark beetles will be drawn to elm trees, pruning elm trees is only allowed from October 1 to March 31 when the elm bark beetles are not active. However, it is equally important that dead wood be pruned out of elm trees as the beetles are naturally on the look-out for dead elm wood for their breeding sites. All elm wood must be disposed properly by either burning or burying to avoid it becoming a haven for the beetles."

Although no DED has been found in Alberta, the SEEBB have been found for the fifth year in Calgary and the fourth year in Edmonton. Approximately 480 sites in Alberta are being monitored for the SEEBB and the NEBB beetles by using sticky traps. Alberta Agriculture takes care of 164 with the remaining being taken care of by the larger cities which all have a good prevention program in place. Monitoring for the beetles is carried out each year throughout the province to determine if the beetles are present. If either the SEEBB or the NEBB is found, surveillance of the disease and beetle monitoring locations is increased in that area.

"A group effort is required for successful DED prevention. STOPDED is asking the public to help with the fight to keep Alberta DED free," says Feddes-Calpas. "Often, as is the case with so many treasurers, its value isn't realized until its gone. Working together, we can save Alberta's elms."

For more information on DED or the program, contact the Dutch Elm Disease Hotline by dialing toll free 310-0000 and then asking for 362-1337. Information is also available on the Alberta Agriculture Internet site at:
http://www.agric.gov.ab.ca/pests/diseases/ded/index.html

Contact: Janet Feddes-Calpas
(403) 362-1337

Changes to Alberta's Water Act

Alberta's new ***Water Act*** introduces significant changes to the management of water resources in the Alberta.

"It is important for recreational users and anyone involved in or acting for the agriculture industry, the oil and gas industry, municipalities, utilities, to understand how this piece of legislation will work and the impact it will have on water users" says Donna Tingley of the Environmental Law Centre.

The Environmental Law Centre is holding a one day workshop October 23, 1998 at the McDougall Centre in Calgary to address Alberta's new *Water Act* which is expected to come into effect this fall. The workshop is held in partnership with the Legal Education Society of Alberta with funding support from Alberta Agriculture, Food and Rural Development's Alberta Environmentally Sustainable Agriculture (AESA) Program and Alberta Environmental Protection. A panel of law professionals and a government representative involved in implementing the Act will cover licencing requirements, environmental considerations and issues that are of particular concern to agricultural producers, the energy industry and municipalities.

"The AESA Council is pleased that the legal profession is taking a leading role in educating not only its members, but the agriculture industry and all water users on the impacts of this legislation. Water quality is a priority area for the agriculture industry and this workshop provides valuable information on environmental aspects of the new Water Act to Alberta's agricultural water users," adds Bruce Beattie, Chair of the AESA Council. The AESA Council directs the AESA Program which provided funding support to the workshop.

The cost of the workshop is $150 for those registering before October 9, 1998 and $180 after October 9, 1998. To register for the conference, call 1-800-282-3900.

Contact: Donna Tingley (403) 424-5099
Bruce Beattie (403) 638-3735

Students and sheep flock to school

The Western Suffolk Sire Reference Program hosted 30 students from Alberta, Saskatchewan and British Columbia at a fresh semen artificial insemination (AI) school on August 22, 1998 at the Olds Cow Palace.

"The instructor for the course was Dr. Brian Buckrell of the Ontario Veterinary College," says Dr. Cathy Gallivan, organizer of the conference. "Buckrell developed the Guelph system for transcervical AI in sheep and is the operator of the Ontario semen collection facility for sheep and goats."

Cont'd on page 3

Prior to the AI school, Dr. Buckrell spent considerable time at the Olds College flock management semen collection facility in Bowden, working with owners Drs. Ileana Wenger and Lynn Tait, and with Olds College 246G and Strand 97G, the two reference sires being used by the Western Suffolk Sire Reference Program in 1998. During the course, the best methods of collecting, extending and storing fresh semen were reviewed.

"The course covered information on the normal breeding cycle of ewes and different methods of synchronising the cycle for natural mating, artificial insemination and out-of-season breeding," says Gallivan. "Many factors affect the success of an AI program. These include: the age of the ewe, the synchronization program, stress, body condition, health, environmental temperatures, semen dose and quality. Knowing how to manage these factors and having the opportunity to practice AI techniques and verifying motility in collected sperm, made the school a day very well spent."

The Western Suffolk Sire Reference Program was started in 1995 to help Suffolk breeders in Alberta select their sheep for lean growth. Using a combination of AI, ultrasound and between-flock EPDs, the members of the program have seen the Lean Growth Index increase from an average of 100 for all lambs weighed and ultrasounded in 1996 to an averaged of 111 for all lambs weighed and ultrasounded in 1998.

"A selection of rams with Lean Growth Indexes of at least 115 were offered at the program's first ram sale on June 27, 1998," adds Gallivan. "The sale was combined with educational seminars, a free lamb barbecue and a trade fair. It is planned to hold the sale annually and next year's sale is scheduled for July 3, 1999."

For more information on the Western Suffolk Sire Reference Program or the AI School, producers can contact Gallivan at (403) 224-3962 or visit the website at **http://www.telusplanet.net/public/gallivan/west.htm**

Contact: Dr. Cathy Gallivan
(403) 224-3962
gallivan@telusplanet.net

Agricultural use for industrial by-products

Since the late 60's, Agriculture and Agri-Food Canada, the University of Alberta and Alberta Agriculture, Food and Rural Development have been researching the management of acid soils. Crop tolerance of soil acidity, crop response to lime and effectiveness of liming materials was the focus of this research. Lime from the eastern slopes of the Rocky Mountains was the source of lime used in these experiments, however, alternative materials such as marl and industrial by-products are also being evaluated.

"It has been shown that a single application of lime can last 15 or more years," says Jerome Lickacz, forage agronomist with Alberta Agriculture, Food and Rural Development, Edmonton. "The research also shows that alternative materials such as marl, burned or quicklime and hydrated lime are effective liming materials when the application rate is adjusted for purity and particle size."

Liming has been shown to decrease soil crusting and improve water infiltration, especially in low organic matter soils and soils with elevated levels of sodium.

"Due to the cost of transportation, there is increased interest in using alternative liming materials," says Lickacz. "By products produced by municipalities and industrial facilities are usually disposed of in landfills or on-site. Alberta Agriculture has cooperated with other government agencies and industry to assess the potential of using these materials in agriculture."

By-product materials with liming value have been identified and assessed to determine suitability for land application. The cities of Red Deer and Edmonton are now land-spreading lime sludge produced during the water softening process at the cities' municipal water treatment plants. In some situations, lime sludge is spread in conjunction with sewage sludge.

"Some pulp mills and saw mills are also interested in land-spreading by-products on agricultural land. Regulatory approval is required in most instances. This approval is contingent on there being no adverse environmental effect on the soil, crop or water and there must be a benefit to the agricultural industry."

Investigations initiated at Peace River, Athabasca and Drayton Valley are being used to assess the liming value of materials currently being land filled. A field trial near Peace River to assess the potential uptake of trace elements by forage and cereal crops has been completed. Regulatory approval for land application of wood ash and other by-product liming materials is now under discussion.

"There is also interest expressed in land-spreading composted yard waste produced at pulpmills and sawmills on agricultural soils," adds Lickacz. "These materials may be beneficial on low organic matter soils that are poorly aerated, have a low rate of water entry and are prone to crusting after intense rainfall. The compost has been used to a limited extent during reforestation and as an organic amendment on agricultural soils."

Research is underway to evaluate the effect pulp mill waste materials may have on nitrogen availability and the use of sulphur by-products produced at sour gas processing plants. Evaluating these waste materials and determining if they have value as land spread fertilizers and organic matters is one step in reducing industrial waste in Alberta and making effective use of industrial by-products.

Contact: Jerome Lickacz (403) 422-1231

Y2K – the new bug to watch for

When computers came into general use, memory space was one of the big concerns. To save digits, most earlier software used only the last two digits of the year, abbreviating 1998 to 98. The concern now is that after the date 12-31-99 (December 31, 1999) the computer rolls the date to 01-01-00 and many computers will assume that the date is January 1, 1900, not 2000.

What's the big problem? Well some bizarre things have already happened. A shipment of canned fish was sent back to Norway from Buenos Aires because the computer said that the shipment exceeded the 'best before' date.

"For agriculture, the problems with the year 2000, or Y2K as it's being called, focuses on farm computers," says George Rock, farm management specialist with Alberta Agriculture, Food and Rural Development, Leduc. "Many farm operators who don't use the computer for anything but doing books may only experience a few days delay. But there is a lot more to the problem than personal computers.

"The worry in agriculture comes from embedded chips. These are microprocessors found in cellular phones, microwave ovens, cars, trucks and farm equipment such as milking machines. While some chips may be Y2K compliant, other manufacturers may have switched suppliers during a manufacturing process."

The Canadian Federation of Agriculture (CFA) has set up a Y2K computer project to work on the problem. Barbara Warner, with CFA recommends taking steps to ensure farms are Y2K compliant. The first step is to do a 'walkabout' taking note of everything that is computerized in an operation. Look at equipment, look for a digital output.

"This means looking at feed systems, milking systems, thermostats and ventilation systems," says Rock. "If anything has a digital readout, it needs to be investigated further. Draw up a plan to determine which equipment is system-critical and which equipment could wait a few days. Contact dealers to determine if the embedded chips are Y2K compliant, and following up with a letter. Ask for responses in writing. Don't forget, some problems may be covered by warranty."

A contingency plan is also a step that should be taken. Have a clear plan, along the lines of a disaster plan, that outlines what can be done manually if systems fail. If there are critical needs that cannot be operated manually, it is imperative that these systems are checked.

There is information available for farmers who feel the year 2000 may pose problems. Canadian Farm Business Management published an extensive article on Y2K in the July/August 1998 issue of *On the farm* Canadian Farm Manager. Agriculture and Agri-Food Canada has an extensive web site devoted to the Y2K problem. The Internet address is: **http://www.agr.ca/policy/y2k/links_e.html**

"If problems are encountered during the investigation of farm machinery and systems, keep in mind that the federal government has accelerated capital cost allowance deduction to offset replacement hardware and software costs. Eligible hardware and software must be Y2K compliant, bought between January 1, 1998 and June 30, 1999 to replace non-compliant hardware and software," says Rock.

More information on the accelerated capital cost allowance deduction is available by contacting Revenue Canada or a chartered accountant.

Contact: *George Rock*
(403)986-8985

Agri-News Briefs

Woodlot Association of Alberta

The third annual general meeting of the Woodlot Association of Alberta is being held at the Coast Terrace Inn, Edmonton, on October 16 and 17, 1998. Also featured, will be the Private Woodlot Market Place/Trade Fair. The two-day event is intended to present business opportunities to private woodlot owners; allow businesses to establish potential partner or supplier relationships; provide for the show and sale of existing private woodlot products; display services and products for private woodlot owners; and, provide exposure for various private woodlot market opportunities. Booths will be open from 4:00 to 10:00 p.m. on October 16 only. Albertans interested in private woodlot management and private woodlot owners are encouraged to attend. For more information, contact the Woodlot Association of Alberta at (403) 453-1754 or call toll free 1-800-871-5680.

New Agriculture web site launched

The Wild Rose Agricultural Producers unveiled its new web site located at **www.wrap.ab.ca**

Wild Rose members and the public can access a variety of information on the organization and on agriculture. As Alberta's agriculture industries continue to grow, they require quick access to reliable information and the Internet is one of the avenues being used more and more. The Wild Rose organization welcomes new information and feedback on the new site. An open invitation to visit and provide comments and suggestions for improvement was extended to all Alberta producers by Alan Holt, Wild Rose president. For further information, contact Rod Scarlett, executive director, Wild Rose Agricultural Producers, (403) 451-5912 or e-mail: **wrap@planet.eon.net**

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51594 8228

Agri-News

September 28, 1998

City Slickers share the bounty

Timing is everything - and what better timing for the City Slickers Harvest than just before Thanksgiving, which is also this year's Agriculture and Food Week in Alberta.

"Thanksgiving is probably the one time of the year when just about everyone gives a thought to harvest time and the efforts that go into producing food," says Betty Gabert, of the Ag in the Classroom program with Alberta Agriculture, Food and Rural Development. "What better time to take 1,000 Alberta inner city students and 200 Airdrie school students to the City Slickers Farm site and have them participate in a real harvest."

Now in its second year, the program was initiated as part of Ag in the Classroom and it gives some Alberta kids, Grades 4 to 6, an opportunity to be involved with the agriculture industry.

"Few city children ever get the chance to actually see the beginning steps of how food is produced and it's important to instill an appreciation of this essential Alberta industry in our next generation," says Gabert. "The City Slickers Harvest is a unique event that gives the kids a great, healthy experience where they can feel really good about the outcome of their work and actually see the benefits to the community. The program organizers work with commodity groups to donate the profits from the harvest, about 20 per cent of it's total value, to the Calgary Interfaith Food Bank and the Canadian Food Grains Bank. Last year, the amount donated was valued at $3,000."

While the program didn't significantly increase the number of kids at the harvest, the City Slickers Harvest program has a long-term, 10 year plan to further develop the site as an interpretive tourism site, expanding its scope as an interpretive area for school field trips and day tours.

"The harvest is a really special event for the kids and this year, Olds College is bringing a delegation from China to showcase the event as an example of community communication and involvement," adds Gabert. "It is turning into a great opportunity for exchange. Also this year, we've had interest expressed by a community in northern Alberta and the possibility is good that another City Slickers site may be up and operating soon."

Cont'd on page 2

This Week

City Slickers share the bounty 1

Safety in numbers 2

Opportunities and profits 3

Venting gassy wells 4

New deadline for environmental programming grants 4

Livestock Advisory Group recommendations to SPC this fall 5

New directors named at Alberta's Crop Diversification Centres 5

Briefs 6

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

The founding partners of the City Slickers program are: Alberta Wheat Pool, Dow AgroSciences Canada, Inc., the Airdrie Ag Society and Ag in the Classroom. These partners, along with sponsorship from the Alberta Canola Producers Commission, Alberta Barley Commission and United Farmers of Alberta (UFA) Cooperative, have funded many of the Ag in the Classroom programs dedicated to bringing an agricultural element into the Alberta education curriculum.

On September 24, 1998, the City Slicker kids harvested the crop grown on land donated by the Airdrie Ag Society. The kids' agriculture experience included grain harvesting, real-life experiences with farm animals, stacking bales, identifying weeds and bidding with play money at an auction.

"Ag in the Classroom and City Slickers are inviting agriculture related industries to get involved this year and top-up the donation being made by the kids," says Gabert. "On October 7, 1998 at 1:30 p.m. at the Calgary Interfaith Food Bank, City Slickers will be making its donation from this year's harvest. We encourage other industry members, producers, processors and companies to join us there and be a part of the event.

"In the spirit of sharing the bounty of our harvest, this is an ideal place to donate new and traditional Alberta-made products. The nature of the Food Bank is that most people only receive Food Bank support occasionally, and the rest of the time they are consumers in Alberta grocery stores. Alberta processors are encouraged to donate and, at the same time, give Alberta consumers a chance to sample their products."

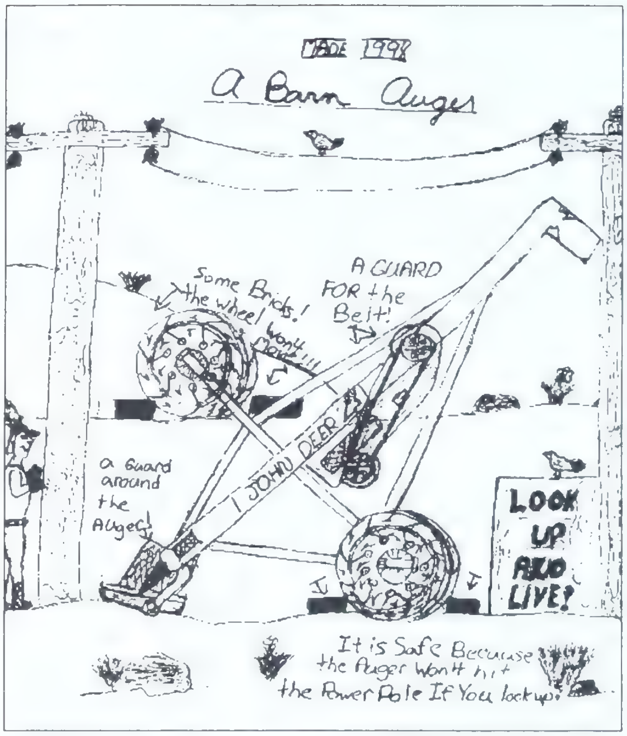
For more information about City Slickers, Ag in the Classroom and the October 7 event, contact Betty Gabert at (403) 427-2171.

Contact: *Betty Gabert*
(403) 427-2171

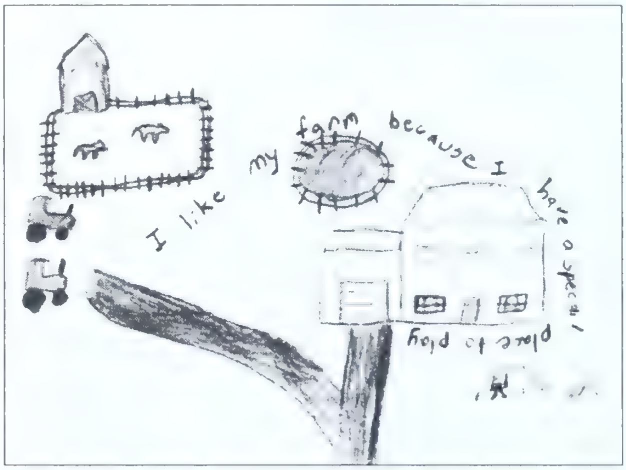
Safety in numbers

Safety isn't something that just happens! It's a learned behaviour, that is why Alberta Agriculture, Food and Rural Development's Farm Safety Program places such emphasis on spreading the farm safety message to Alberta children and farm families.

Oden Sandelin of Ardmore and **Meghan Nannt** of Rolling Hills demonstrated their skills in communicating their favourite farm safety message and are the two Grand Prize winners in the recent John Deere Farm Safety Contest.


MADE 1998
A Barn Auges
Some Bricks! the wheel won't move!!!
A GUARD FOR the Belt!
a Guard around the Auges!
JOHN DEER
LOOK UP AND LIVE!
It is Safe Because the Auger Won't hit the Power Pole If You look up!

Oden Sandelin, age 10, grade 4, Ardmore School


I like my farm because I have a special place to play

Meghan Nannt, age 10, grade 4, Rolling Hills School

"The farm safety program is always well received by children, families and communities," says Solomon Kyeremanteng, head of the Farm Safety Program, Edmonton. "Farm safety is a serious message, but adding some fun and excitement when delivering that message has made the farm safety program a success. Targeting children gives the program exposure to a wider audience and we have found that the children and their families are clearly the ones who benefit from a safety conscious change in attitude."

A Safe Farm is a Great Place to Grow is the on-going theme championed by the Farm Safety Program and the campaign slogan for the Farm Safety Contest, sponsored in partnership with John Deere Limited.

Cont'd on page 3

On a special entry form, Alberta's rural school children, grades one to four, were asked to pick one of their favourite things about a safe farm, draw a picture or tell a story about why their safety message makes a safe farm a great place to grow up. Entries were to be mailed to Alberta Agriculture before the entry deadline of June 15 and were then judged over the summer months.

"We received 3,000 entries from all over the province," says Kyeremanteng. "As usual, the children's creativity exceeded all our expectations. They know more about farm safety than we give them credit for. One of the most rewarding features is that when we see farm safety messages become life skills, we know we've all won!"

The contest prizes consisted of two Grand prizes - one family trip for four to Calgary and one family trip for four to Edmonton including overnight accommodation and tickets to an NHL hockey game; 50 – 1st prizes of knapsacks with cooler bags; and, 100 – 2nd prizes of insulated lunch bags.

"We were very pleased that Alberta Agriculture, Food and Rural Development once again asked John Deere to participate in their farm safety program," says Bonnie Hayden manager, Marketing Communications, John Deere Limited, Grimsby, Ontario. "This is the fifth Alberta Agriculture campaign in which our company has participated. We and our John Deere dealers are deeply committed to farm safety and feel this program is a tremendous way of creating safety awareness amongst rural communities in this province."

Contest prize presentations were coordinated by local John Deere Limited dealerships throughout the province. From grades one through four, Alberta school kids are doing an excellent job communicating farm safety.

"Alberta children clearly demonstrate that they know how important farm safety is. Parents also need to practice farm safety and be conscientious role models," adds Kyeremanteng. "Farm safety brings its own rewards. ***A Safe Farm is a Great Place to Grow***!"

Contact: *Solomon Kyeremanteng* *Bonnie Hayden*
(403) 427-4227 *(905) 945-7314*

Opportunities and profits

Special Crops Product Team of the Alberta Agriculture, Food and Rural Development, in consultation with the special crops industry, has planned the Second Conference in this decade on Opportunities and Profits into the 21st Century on November 1-3, 1998 in Edmonton.

"The first such Conference was held in July 1995 in Calgary," says Nabi Chaudhary, chairman of the special crops product team with Alberta Agriculture, Food and Rural Development. "It attracted almost 200 participants. Since the First Conference on special crops, several developments have taken place in this sector of the agriculture industry. Many new crops that have been grown for several centuries in the Far East are now being tried in North America. Commercial production and recent production trials of crops such as borage, echinacea, garlic, fenugreek, chick peas, dill, ginseng, hemp, cumin, coriander and others, have shown that these new and emerging crops have great potential to improve net farm income and for crop diversification purposes."

The recent downward trend in major cereal grains and oilseeds prices has also generated a lot of interest among producers for these new and emerging special crops. The small field pea crop of the 80's occupied almost 500,000 acres in Alberta in 1998. Similarly, other special crops, like lentils, mustard, sugar beets, beans, canary seed, caraway, sunflower, mints, dill and safflower are showing considerable increase in area across the prairies . Herb and medicinal plants production is also on the rise. It is estimated that total area of all these crops in Alberta reached almost 800,000 acres in 1998. It is expected to increase at a higher rate in the years to come.

"The Opportunities and Profits II Conference brings together researchers, traders, processors, and producers with hands on experience to share their knowledge with conference participants on field scale production, processing, value-adding, niche markets, and international and domestic marketing of special crops," adds Chaudhary. "The conference also provides an excellent opportunity to interested parties to increase their network. The resource people for the conference, local, national and international are well known experts and experienced in their respective areas."

In addition to receiving financial support from several chemical, fertilizer, seed companies and financial institutions, this conference is being co-sponsored by Alberta Agriculture Research Institute; Agriculture and Food Council - Canadian Adaptation and Rural Development Fund (CARDF); Agriculture & Agri-Food Canada – Agri-Food Trade 2000.

More information and registration brochures are available at any Alberta Agriculture, Food and Rural Development district offices or by calling: Wayne Goruk at (403) 427-3122, Dr. Stan Blade at (403) 422-1789 or Kathy Lowther at (403) 556-4220.

Contact: *Nabi Chaudhary*
(403) 422-4054

Venting gassy wells

It seems that every year there are reports of natural gas explosions and fires in pump houses. Usually, no one is injured but it's a dangerous situation. This type of explosion can happen when gassy wells aren't vented properly. Natural gas in farm water wells is a common problem in Alberta. Usually there is not enough gas to be usable, just enough to be a nuisance, and sometimes enough to be an explosion hazard.

"Methane gas is colourless and odourless," says Ken Williamson, agricultural water specialist with Alberta Agriculture, Food and Rural Development, Red Deer. "At high enough levels the gas can be seen or heard bubbling in the well. Often the gas is dissolved in the water due to the high pressure and low temperature down in the well. When the well is pumped hard and the water level is drawn down, the gas will come out of solution, due to the reduced pressure, and form gas bubbles. If this gas is trapped somewhere, such as in a well pit or pump house, it can build up to an explosive level. The spark from a pump motor or pressure switch can then set off an explosion."

There are several ways to prevent a dangerous situation from occurring. One is to make sure the well casing is vented to the outside. Fortunately, most new wells are located away from buildings and use pitless adaptors and vented caps. Some older wells, located in pits, pump houses, and house basements, are the ones with the highest risk, particularly in the winter when these structures are sealed up to protect them from freezing. In these situations the top of the well casing must be vented to the outside.

"Gas can also accumulate in pressure tanks and hot water heaters," adds Williamson. "When this happens, the gas builds up until it spurts out of household taps. The burst of gas can knock a drinking glass out of someone's hand or catch fire if there is a source of ignition. Gas release vents can be installed on some pressure tanks and on hot water heaters. These will not totally solve all gas problems, but can make them tolerable."

The only way to completely remove dissolved gas from water is to spray it into a ventilated tank and then repressurize the water with another pump.

For more information, the Alberta Agriculture's Agri-fax, ***Dissolved Gases in Well Water*** (Agdex 716 D18), discusses gassy well problems in more detail. It is available at all Alberta Agriculture district offices and at the publications office, 7000 - 113 Street, Edmonton, AB T6H 5T6.

Contact: Ken Williamson
(403) 340-5324

New deadline for environmental programming grants

The deadline for applications to the Farm Based component of the Alberta Environmentally Sustainable Agriculture (AESA) program has been moved ahead to ***November 30, 1998.***

"The deadline was moved to November 30 in order to streamline the planning and application process," says Bruce Beattie, chair of the AESA Council which directs the program. "Feedback received from municipalities and some organizations prompted the AESA Council to change last year's January deadline so that it coincides with year-end financial and work planning."

Agricultural service boards, agricultural and environmental organizations and Native groups can apply for funding under the AESA Farm Based component to carry out extension projects that reduce agricultural impacts on the environment. Under the program, applicants are required to prepare three-year plans outlining priority issues for their organization, program details and activities, partnerships and budget. Funds are provided on a cost-shared basis.

"Last year, the AESA Farm Based component funded 589 projects totalling over $2 million," says Beattie. "Projects funded range from direct seeding demonstrations to manure management workshops to riparian area assessments and demonstrations. The Council was extremely pleased with the quality and variety of projects carried out in the past year and looks forward to the continuation of many of these projects as well as new projects."

The AESA program was implemented by Alberta Agriculture, Food and Rural Development in 1997 to continue the development and adoption of management practices and technologies that make the agricultural production and processing industry more environmentally sustainable.

In addition to the Farm Based component, the program also provides funding for research, monitoring of soil and water quality and developing more environmentally friendly food processing practices.

Applications for the Farm Based component of the AESA Program are available from the Conservation and Development Branch, Alberta Agriculture, Food and Rural Development, #206, 7000 - 113 Street, Edmonton, Alberta T6H 5T6, or by calling (403) 422-4385. Applications are also available on the Alberta Agriculture Internet site at: **http://www.agric.gov.ab.ca/navigation/sustain/about/index.html**

Contact: Bruce Beattie *Carol Bettac*
(403) 638-3735 *(403) 427-3885*

Livestock Advisory Group recommendations to SPC this fall

This fall, the Government of Alberta is releasing the results of the recent public consultation process on regulatory options for livestock operations. As well, a newly-appointed stakeholder advisory group plans to share its recommendations on how to best facilitate responsible development and operation of livestock operations.

"Albertans want government to ensure that the livestock industry develops and prospers in a manner that is environmentally sustainable and protects human health. They also want local matters to remain with municipal government," says Mike Pearson with the Policy Secretariat of Alberta Agriculture, Food and Rural Development. "This message was given to the provincial government during the recent consultations and was echoed by the stakeholder advisory group formed by the Minister of Alberta Agriculture, Food and Rural Development, Ed Stelmach."

Over 800 Albertans attended 18 open houses across the province to share their views on how livestock operations should be regulated. As well, the advisory group received 238 written submissions from interested Albertans and organizations. The advisory group was formed to assist in the review of public response to the *Regulatory Options for Livestock Operations Discussion Paper*. The Discussion Paper was published last March in response to concerns expressed by municipal governments, livestock producers and private citizens regarding the current process for approval of new livestock facilities.

The Discussion Paper also asked for the public's input on maintaining the environmental sustainability of existing livestock operations. Comments were made on the approval process, operating regulations, compliance and enforcement options. These ideas will become the basis for recommendations to be brought to the Standing Policy Committee (SPC) on Agriculture and Rural Development in November, 1998. The advisory group anticipates that if new regulations are required to meet its objectives, these regulations may be implemented in 1999.

The purpose of this process is to ensure that new and expanding intensive livestock facilities are properly sited, designed and operated based on sound science to ensure minimum risk of soil and water contamination and minimum odour nuisances. These same standards may also apply to existing operations. Ideally, all stakeholders would understand their roles and responsibilities. Alberta Agriculture continues to facilitate responsible livestock development and is working toward efficient and effective approval processes.

"We appreciate the time and effort that people put into their responses," adds Pearson. "The responses are very thorough. Alberta has a reputation for providing the world with high quality food. We want to maintain our competitive edge in global markets with our producers' continued commitment to sustainable farming practices."

Governments and industry across Canada have also expressed interest in the *Regulatory Options for Livestock Operations Discussion Paper*.

The advisory group is co-chaired by Barry Mehr, Assistant Deputy Minister, Alberta Agriculture, Food and Rural Development and Aaron Falkenberg, Alberta Chicken Producers. The advisory group members include representatives from the Alberta Association of Municipal Districts and Counties, Alberta Urban Municipalities Association, Environmental Law Centre, Regional Health Authorities of Alberta, Alberta Cattle Commission, Alberta Pork Producers, Alberta Cattle Feeders' Association, Alberta Milk Producers, Alberta Agriculture, Alberta Environmental Protection, Alberta Health and Alberta Municipal Affairs.

Contact:	*Barry Mehr*	*Mike Pearson*
	(403) 427-2442	*(403) 422-2070*

New directors named at Alberta's Crop Diversification Centres

Dr. Stan Blade, P.Ag., was recently appointed Director of the Crop Diversification Centre North (CDCN), Edmonton. CDCN is a research station, supported by the plant industry division of Alberta Agriculture, Food and Rural Development, which is actively involved in research associated with special crops, greenhouse production, vegetables, apiculture, entomology, seed potatoes, nursery crops, plant pathology and tissue culture and other diversification opportunities.

"The potential for crop diversification in Alberta is very exciting," notes Blade. "We anticipate continued collaboration with producers and processors to grow and add value to a growing array of crops in the province."

Blade was also named Leader of the New Crop Development Unit, responsible for the special crops program. The Unit has the mandate to conduct production and processing research on a wide variety of potential new crops for the province. The Unit has scientists and technical staff based in Edmonton, Lacombe, Falher and Brooks. Blade's own special crops research program will continue under his guidance, with emphasis on pulses, spices, medicinal plants and fibre species.

Dr. Ron Howard was recently appointed Director at the Crop Diversification Centre South (CDCS), Brooks, and as Leader of the Horticulture Unit in the plant industry division. Howard will oversee the activities of over three dozen permanent staff working in the areas of research, technology transfer, administrative support and farm operations.

Cont'd on page 6

"There are significant opportunities for expansion of primary production and value-added processing within the horticultural industry in the province," says Howard. "I am pleased to be associated with such a dynamic and fast-growing industry and look forward to working with the many dedicated people and organizations involved in it."

With over 23 years experience with Alberta Agriculture, he will be responsible for directing programs concerned with production, protection, storage, processing and marketing of fruits, vegetables, greenhouse crops, potatoes and nursery crops. These programs and their associated staff are based at CDCS and CDCN. Howard will also continue to do research and extension work related to plant disease management.

The horticultural industry in Alberta is currently valued at over $250 million. Blade and Howard, in their capacity as Directors, will actively encourage further development of this industry.

Contact: Dr. Stan Blade
(403) 422-1789
Dr. Ron Howard
(403) 362-1300

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51594 8400

Agri-News Briefs

Agribusiness Management Training

The new Alberta Green Certificate initiative, ***Agribusiness Management***, is based on an industry approved curriculum reflecting knowledge and skills in all areas of management. A major feature of the program is the use of the Internet to connect program participants with acknowledged experts. As in all Green Certificate apprenticeship style training, the Green Certificate in Agribusiness Management will be granted when performance standards have been met. The program is available throughout the province and the course runs from November 1998 to April 1999. The cost, approximately $500, is dependent on the number of participants at each location sharing resources. For further information, contact a regional Green Certificate Training Specialist or Green Certificate, Agriculture Education and Community Services, Alberta Agriculture, Food and Rural Development at (403) 427-4308; fax: (403) 422-7755; or e-mail: **don.bushe@agric.gov.ab.ca**

Poinsettia production

Two Poinsettia Production Open Houses, hosted by the Alberta Greenhouse Growers Association are scheduled for October 7, 1998, at Balzac Garden Centre and Greenhouses, #237 Main Street, Balzac, Alberta and October 14, 1998 at Morinville Greenhouses. Start time for both open houses is 1:00 p.m. and will continue until approximately 4:30 p.m. The topics covered will include: *Challenges to Growing High Quality Poinsettias* and *How to Manage Insect Pests*. Each day will wind up with a tour of the greenhouse facilities. For further information and to register, contact Dr. Mohyuddin Mirza at Alberta Agriculture's Crop Diversification Centre North, (403) 415-2303.

1998 Agronomy update

Alberta Agriculture will be holding the annual Agronomy Update conference in Lethbridge on January 21 to 22, 1999. The conference is intended to provide an update on the latest agronomic research going on in the province. Over 30 speakers will be discussing their latest results. There will be a number of sessions with most having an in-depth panel discussion period. Sessions include:

- Soil fertility and soil management – new fertilizer products, elemental S fertilizer, measuring soil quality and soil health
- Manure management update – lessons from long-term research plots, composting manure and new research projects being initiated
- Silage production – utilizing barley, triticale and corn for silage
- Insect update – outbreak forecasts, new research, developing crop resistance to insects, environmental impact of insecticides and bio-control of insects
- Crop production research – including canola and cereal research, growing high protein wheat and optimizing pea production
- Crop rotation research – why rotations are critical to optimizing yields and importance of rotations in disease control
- Herbicide and weed update – precision spr**aying of weeds, controlling dandelions in zero-till and hay, effect of time of weed removal on yields, integrated weed management, update on weed resistance to herbicides and implications for on-farm herbicide management.**

For more information or to register, contact Ross McKenzie (403) 381-5842 or Alberta Agriculture staff at the agronomy unit office (403) 381-5126, Lethbridge.

Agri-News

October 5, 1998

Laugh a little – learn a little

Humour is often used to drive home a message. A chuckle or a smile seem to act as a memory enhancer. Mixing humour with agricultural messages is the idea behind a new industry sponsored program called ***The Flip Side of Agriculture***.

"Ag in the Classroom, Alberta Agriculture, Food and Rural Development's educational program, is partnering with agriculture industries to make cartoon and information columns available to Alberta media and agriculture media in western Canada for use as weekly insertions," says Betty Gabert, Ag in the Classroom program manager. "We have the first 10 ready and they will be delivered to Alberta print media this week. The *Flip Side* program is intended mainly to raise awareness of the Ag in the Classroom program which has been in operation in Alberta for 14 years."

Timing of the production of the first *Flip Side* pieces, the week of October 5, make it possible for print media to begin using the series during this year's Agriculture and Food Week, October 11 to 17. The *Flip Side of Agriculture* is intended to inform and entertain. The columns and cartoons are being offered for media's use on a regular basis.

United Grain Growers (UGG) are the industry sponsors for the first 10 pieces. Included with the introductory package, media will find a re-order form that they can submit back to Ag in the Classroom to receive regular *Flip Side* additions.

"Anyone wishing access to the weekly columns and cartoons for reprint are welcome to them," adds Gabert. "The only restriction is that the columns and cartoons are not to be used for resale. We hope to continue producing *Flip Side* cartoons and accompanying columns on a variety of agricultural subjects. Agriculture industries are invited to sponsor future additions. For their sponsorship, their company logo would be featured on the cartoons."

Agriculture industries can contact Betty Gabert at (403) 427-4225 for further information on the *Flip Side of Agriculture* and for details on what sponsorship entails.

The Flip Side of Agriculture

Mrs. Turkey has a right to be upset: a flock of turkeys usually numbers in the thousands. Every year, two million turkeys are raised commercially in Alberta. The result is approximately 14 million kilograms of fresh turkey (not all eaten at Thanksgiving, of course).

Cont'd on page 2

This Week

Laugh a little – learn a little 1

Spice crops and related weed science 3

Agri-business management training 4

Harvest time and Thanksgiving 5

Rat sighting season 5

Comprehensive risk management 6

Briefs 7

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

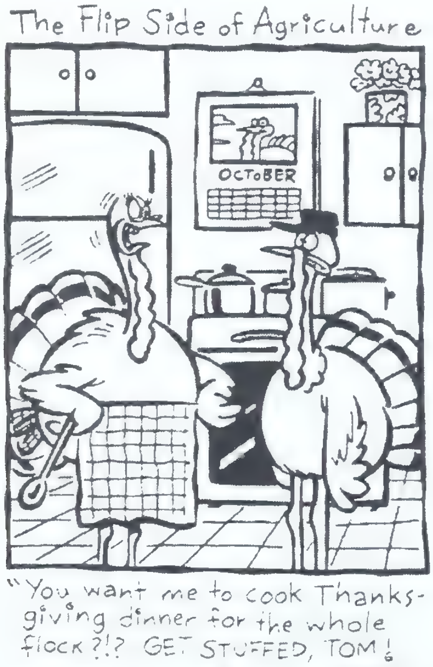
Alberta AGRICULTURE, FOOD AND RURAL DEVELOPMENT

Turkeys and Thanksgiving dinner go way back. The Pilgrims who arrived in North America in the 17th century are generally credited with first serving turkey at a feast to celebrate the harvest, later known as Thanksgiving. In fact, this was one of the many things copied from their aboriginal friends.

The turkey at that first feast didn't look exactly like our turkeys now. For one thing, it was a wild turkey the Pilgrims had on their plates. The average wild turkey cock weighs between seven and eight kilograms, about the same as a medium-sized domestic turkey today. The difference is that modern turkeys have been selectively bred for plump, tender breasts and thighs. In comparison, wild turkeys look as if they spend most of their time working out at the gym. They're leaner, more muscular and, unlike today's turkeys, have wings large and strong enough to enable them to fly quite well.

Our modern turkeys can be proud of their ancestry. They have the distinction of being the only major source of meat to originate in North America. Native tribes in Mexico and the southwestern United States began domesticating wild turkeys as early as 400 A.D. Early explorers of the New World took the birds back to Europe, where they quickly became popular. These European turkeys were later reintroduced to North America by the colonists. Over time, selective breeding resulted in larger, meatier birds with large breasts and tiny useless wings.

Here's a feather in the turkey's cap: 46 per cent is edible, more than any other type of poultry. Pound for pound, it is usually less expensive than beef, pork or lamb. Clearly, the turkey has more to recommend it than simply tradition. No wonder it keeps on being invited onto our Thanksgiving dinner tables.


The Flip Side of Agriculture
OCTOBER
"You want me to cook Thanksgiving dinner for the whole flock?!? GET STUFFED, TOM!

Alberta UGG

The Flip Side of Agriculture

Alberta farms and ranches are becoming home to a variety of exotic birds and beasts. From elk to emus; angora rabbits to rhea; non-traditional livestock are part of the trend toward diversity in Alberta agriculture.

Some of the new faces on farms have always been found in Alberta – elk, bison and deer, to name just a few. But others are true exotics.

Several large, flightless birds are also starting to pop up on menus as alternatives to prime rib. The ostrich, an immigrant from South Africa, has been joined by emus from Australia and rhea from South America. In addition to low-cholesterol red meat, these big birds provide interesting leather for boots and bags, and oils used in cosmetics.

Llamas are quickly becoming a familiar sight, and are now being joined by their alpaca cousins. Alpacas were originally domesticated over 5,000 years ago in South America. Both are raised primarily for their warm, soft, strong hair. Alpacas have the distinction of once clothing the royal families of the ancient Inca civilization.

And, if you still can't find the perfect sweater, take heart. Angora, cashmere and mohair adorn the backs of still other exotic species and breeds finding their way to Alberta. So, next time you're driving in a rural area, take a second look at what's looking over the fence. You may be surprised at what is looking back at you.

The Flip Side of Agriculture
Canada Customs
Exotic Livestock
And yer tellin' me you all have jobs on Alberta farms?!!

Alberta UGG

Contact: *Betty Gabert*
(403) 427-4225

Spice crops and related weed science

In Alberta, some producers have chosen spice crops to diversify their crop production choices. The major spice crops in western Canada are caraway and coriander which are grown on approximately 18,250 and 9,300 acres, respectively

"Alberta produces 2,700 acres of caraway," says Rudy Esau, weed scientist at Alberta Agriculture, Food and Rural Development's Crop Diversification Centre South (CDCS), Brooks. "No published data are available on coriander production in Alberta. However, there are small pockets of coriander production across the province. According to the 1996 Census of Agriculture, dill was produced on almost 1,800 acres in Western Canada and about 440 acres in Alberta Cumin is grown on a smaller scale in Saskatchewan and Alberta."

Caraway is most commonly grown as a biennial crop although annual varieties are being developed. Its uses are mainly for flavouring baking and cheese products. The seeds of coriander and cumin are also used for flavouring foods and are an ingredient in curry. Dill is grown mainly for its oil which is used in pickles and other foods.

When considering spice crops, producers should be aware of the crops' special weed control problems and other agronomic management aspects. Production and management of these special crops, with the exception of cumin, have been studied at CDCS.

"The Weed Science Program at CDCS has conducted a number of tests to develop herbicide programs for caraway, coriander and dill," says Esau. "These three crops and cumin are botanically related as members of the parsley or *Apiaceae* family. Carrot is also related to these spice crops, so some of the weed control practises already developed for carrot were a starting point for developing a weed control program for spice crops."

Caraway, coriander and dill are tolerant to trifluralin (Treflan and related products) and ethalfluralin (Edge), however, only Edge is registered for use in these crops. Poast is registered for the control of certain grasses, including the suppression of quackgrass. Caraway, generally is seeded with a companion crop, therefore growers must ensure that the herbicide used is compatible with both crops.

"Companion crops for caraway production have been investigated by Dr. Refe Gaudiel, who until his recent retirement, was responsible for the Special Crops Program at CDCS," adds Esau. "In both study years, flax and barley caused significant reductions of caraway seed production in the following year. Canola was only tested one year, but no caraway seed yields were realized in the first harvest. To develop a herbicide program with safety on both crops is more difficult and restrictive depending on the choice of a companion crop. Coriander has been successfully used as a companion crop at CDCS."

Screening trials with various herbicides have shown that metribuzin, clopyralid, MCPA and several others are too toxic to caraway. Herbicides to control Canada thistle and perennial or annual sow thistle are not available for use in these spice crops, but a product is available to control wild mustard

Linuron (Afolan, Lorox, Linuron 480) herbicide, commonly used for commercial carrot production, provides control of wild mustard, has been tested for caraway, coriander and dill. Of these three crops, dill is the most sensitive to linuron products. After research trials in Alberta and Saskatchewan, Afolan F was registered via the minor use of pesticides program for the 1997 growing season for caraway and coriander seedlings; Afolan F had been registered for dill earlier. Lower than label rates of linuron have been evaluated for dill from 1994 to 1997. Oil yields of dill and carvone content were not significantly affected when a combination of Edge preplant incorporated followed by linuron application at the two-leaf stage of the crop. The combination of these two herbicides provided the best weed control and crop safety to dill.

"The Weed Science Program continues to generate information on weed management programs for special crops," says Esau. "Work is underway for desi chickpeas, canaryseed, and dry beans. In previous years, development work for fenugreek, spearmint, peppermint, and basil was also conducted. In addition, the persistence of several soil persistent herbicides used in special crops is also being investigated."

Contact: *Rudy Esau*
(403) 362-1331

Agri-business management training

Alberta Agriculture, Food and Rural Development's Green Certificate Program, an apprenticeship style competency based training program, has announced a new Agribusiness Management Certificate. This comprehensive training initiative brings together all factors of production and operations management, financial management, human resources organizational planning, marketing, risk management, business development and enterprise management.

"As in all Green Certificate Programs, the Agribusiness Management Certificate is based on an industry-approved curriculum with objective performance standards," says Don Bushe, consultant to Agriculture Education & Community Services, Alberta Agriculture Food & Rural Development. "The curriculum sets out the knowledge to be learned and provides the benchmark for performance. On-the-job application of skills and knowledge is provided by the participating agribusiness."

A grant from the Farm Business Management Program (FBMP) provides participants with self-study video and print resources. Applying skills on-the-job is aided by contact with experts on key content topics using the conferencing facilities of the Internet.

As part of the program, trainees receive: up to 20 printed modules; as many as six video tapes; and, access to experts on-line.

On-line expert assistance includes, Dr. Len Bauer, noted rural economist, who heads the panel of experts presenting the basic economics, production management, risk, and financial topics and Lorne Owen, human resources expert, coordinates the discussion applying staffing topics. In addition, a panel of experts representing commodity groups and enterprises particular to the participants will be identified to guide the application of marketing theory.

"Agribusiness Management Training starts in November 1998 and continues through April 1999," says Bushe. "There are three testing periods where participants will be asked to demonstrate their mastery of the objectives. All participants in Agribusiness Management Training receive a Certificate of Participation. Each participant's training record monitors progress in earning a Green Certificate in Agribusiness Management. When the objectives and standards in the curriculum have been met, the Green Certificate in Agribusiness Management is granted."

For further information, program details, costs, on-line addresses and topics, contact:

Agriculture Education & Community Services
Alberta Agriculture Food & Rural Development
7005 - 114 Street
Edmonton, AB T6H 5T6
Phone: (403) 427-4308
Fax: (403) 422-7755
e-mail: don.bushe@agric.gov.ab.ca

Or, contact a regional Green Certificate Training Specialist:

Southern Region
John Calpas
Lethbridge Community College
3000 College Drive
Lethbridge, AB T1K 1L6
Phone: (403) 320-3311
Fax: (403) 317-3540
e-mail: lmvanden@raptor.lethbridge.ab.ca

Central West Region
Garry Clark
Alberta Agriculture
Box 4535, Provincial Building
Barrhead, AB T7N 1A4
Phone: (403) 674-8213
Fax: (403) 674-8362
e-mail: shirley.lynes@agric.gov.ab.ca

South Central Region
Cara Anderson
Olds College
4500 - 50th Street
Olds, AB T4H 1R6
Phone: (403)507-7928
Fax: (403)556-4711
e-mail: canderson@admin.oldscollege.ag.ca

South Central Region
Janet Veno
Olds College
4500 - 50th Street
Olds, AB T4H 1R6
Phone: (403) 556-4663
Fax: (403) 556-4711
e-mail: jveno@admin.oldscollege.ag.ca

North East Region
Walter Scott
Alberta Agriculture
Provincial Building, 4701-52 St, Box 519
Vermillion, AB T9X 1J9
Phone: (403) 853-8223
Fax: (403) 853-4776
e-mail: pat.feenstra@agric.gov.ab.ca

Cont'd on page 5

North West Region
Peggy Johnson
Fairview College
Box 3000
Fairview, AB T0H 1L0
Phone: (403) 835-6737
Fax: (403) 835-6783
e-mail: spjohn@ telusplanet.net

Contact: Don Bushe
(403) 427-4308

Harvest time and Thanksgiving

Harvest has been bountiful. Summer was warm and sunny. Winter isn't here – yet. All solid reasons for being thankful.

"Thanksgiving is a harvest celebration. Canadian Thanksgiving celebrations are the result of combining both European and North American traditions," says Linda St. Onge, food scientist with Alberta Agriculture, Food and Rural Development, Leduc. "Settlers celebrated harvest time and the abundance of food gathered that would sustain them over the coming winter. Celebrating the harvest usually included adding new foods to the feast that weren't available in the 'old country'."

Whether choosing turkey, chicken, ham or beef, be sure to prepare, cook, serve and store the Thanksgiving feast properly and safely. Preparation time is probably the most labour intensive. Handling raw meat deserves some extra care and attention. Be sure to wipe down surfaces both before and after preparing meat. Use clean utensils for cutting, scoring and lifting. Be sure to wash utensils in soapy water before using again.

"It takes very little time to sanitize the surface where raw meat has been sitting before chopping up vegetables but it makes a huge difference in controlling the transfer of bacteria," says St. Onge. "The best rule to follow is to wash all surfaces and all utensils before and after using them. Use a tablespoon of bleach in a gallon of water to wipe surfaces on which raw meats have been prepared. This step helps eliminate bacteria."

Make sure to follow the guidelines for temperature and time to thoroughly cook meats. Meat thermometers make it easy to monitor the internal temperature of meats to ensure they are cooked properly.

"After meal clean-up and storing are equally important," notes St. Onge. "Be sure to wrap and refrigerate meats as soon as possible after the meal is over. Vegetables and sauces should be wrapped and refrigerated right away, also.

"Have a safe, wholesome holiday. Remember, taking a few extra minutes can make a big difference with holiday left-overs."

Thanksgiving dinner ideas are many and varied. Alberta's producer groups have interesting ideas on serving traditional dishes with some new twists. Alberta Turkey Producers (403) 465-5755; Alberta Chicken Producers (403) 488-2125; Alberta Pork Producers (403) 474-8288; and, Alberta Cattle Commission (403) 275-4400 all provide information to the Alberta public about their product including cooking and handling instructions and interesting, innovative recipes for making your Thanksgiving feast.

Contact Linda St Onge
(403) 980-4873

Rat sighting season

Late summer and early fall is when many rodent species are on the move in search of winter quarters and new territory. It's also a time when Alberta Agriculture, Food and Rural Development receives the greatest number of suspect rat sightings.

"Young muskrats, pocket gophers, ground squirrels and mice are often misidentified as Norway rats," says John Bourne, provincial vertebrate pest specialist with Alberta Agriculture, Vermilion. "Circumstances surrounding the sightings of rodents place heavy suspicions on the Norway rat. For instance, a medium sized rodent scurrying down an alley at dusk or an animal with a long, hairless-tail running across an open parking lot are unusual locations for ordinary rodents. That coupled with the fact that most Albertans don't know what a Norway rat looks like, are the main causes for the increase in rat sighting calls."

Young rodents disperse from their family unit and seek new territory in late summer and early fall. Unfortunately, this often lands the naive, relatively clueless creatures into some very unlikely settings. Young muskrats crossing roadways at dusk or juvenile gophers, ground squirrels and muskrats in dimly lit garages, lumber yards, vacant lots, on sidewalks or curbs lead people to believe that the creatures must be rats.

"In other situations, unidentified rodent remains found at back doors or on lawns, cause residents to suspect a rat," adds Bourne. "An adult Norway rat is no small rodent. Adults can weigh up to one pound and measure over 15 inches in length, which includes a six to seven inch tail. A young muskrat is almost exactly the same size and weight, but will appear larger because of its soft, thick undercoat.

"The distinguishing features of a Norway rat, apart from its size is the cylindrical or rope-like, tapered tail that is nearly as long as the body and is covered with short bristly hairs. Another major feature is the rat's colouring; the underbelly is whitish or buff while the sides and back are distinctly tan or brownish in color. The hair is short with no undercoat or guard hairs. Rats also have long facial whiskers."

Cont'd on page 6

Norway rat droppings are unique. They are best described as the size and shape of a black olive pit (1/2 to 3/4 inch), shiny black in color and blunt at both ends.

"The most important steps to take in reporting a suspicious rodent is to contact an Alberta Agriculture office as soon as possible and, where applicable, preserve as much evidence, such as animal remains, as possible," says Bourne.

To report a suspicious rodent sighting, call (403) 853-8225. The number is toll free in Alberta by dialling 310-0000 first and then dialling or asking for 853-8225.

Contact: *John Bourne*
(403) 853-8225

Comprehensive risk management

Farming is influenced by many factors, some under a farm manager's control and some totally outside that control. A recent paper by the Canadian Farm Business Management Council (CFBMC) states that, "the purpose of risk management is not to eliminate risk entirely, but to manage risk to an acceptable level for effective farm performance".

"The concept of risk management is being talked about a great deal lately," says Nan Bartlett, program representative for Canada-Alberta Farm Business Management Program (FBMP). "*Introduction to Risk Management*, a U.S. Department of Agriculture publication, gives two main reasons for this. First, because many factors are beyond their control, farm and ranch managers are in a volatile risk environment. These factors include: global and national integration of agriculture; changing consumer demands and concerns; the rapid development of new technology; and, changes in the composition of the farm population.

"Second, the potential to take advantage of new opportunities to increase earnings and net worth through more disciplined risk management has never been greater."

Comprehensive risk management is a holistic approach to addressing the full range of risk variables in an integrated way. Each decision a farm manager makes impacts another. For instance, marketing plans can increase creditworthiness and have a positive benefit on the cost of credit.

"Risk management is a process, not an end product," says Bartlett. "It allows farm managers to take advantage of new opportunities and farm with confidence in a rapidly changing world."

Farmers looking for more information on risk management are invited to take advantage of some upcoming opportunities. The Canadian arm of Business Management Council and the Canadian Federation of Agriculture are offering an Agriculture Risk Management Conference in Hull, Quebec on October 28 and 29, 1998. The two days focus on identifying emerging issues in Canadian agriculture and the implications of emerging risks for farm and agri-business managers. For more information, phone 1-888-232-3262 or visit the CFBMC Internet site at **http://www.cfbmc.com**

"Closer to home, the Alberta FBMP is focusing the fall edition of the Right Now publication on risk management," adds Bartlett. "Farmers and ranchers will find it in mailboxes in mid-October."

Contact: *Nan Bartlett*
(403)835-4288

Agri-News Briefs

Horse Whisperer training

Chris Irwin, known as the Canadian Horse Whisperer, is being brought to Alberta by Olds College to teach a course on this unique skill, called *Discover Your Horse Sense*. The course, being held in partnership with the Okotoks Agricultural Society, is scheduled for on October 23 to 25 in Okotoks. While the course is already full, spectators can attend for a $25 per day fee. Irwin, who has released a book and a series of instructional videos on his training methods, regularly lectures at the Western College of Veterinary Medicine at the University of Saskatchewan. He has an extensive background in a wide variety of horse disciplines and has earned 18 National U.S. Championships in riding and driving. Because interest has been so keen, Olds College is inviting Irwin back and will offer *Discover Your Horse Sense* again in 1999. For more information about auditing the fall course or receiving information on next year's course dates, contact Jennifer Hunder or the Olds College Extension department at 1-800-661-6537 or (403) 556-8344 in Olds.

Fundamentals of extrusion processing

Alberta Agriculture, Food and Rural Development's Food Processing Development Centre is offering a course on extrusion processing on November 9 to 11, 1998 at the Centre in Leduc. The three-day seminar and workshop will provide an overview of extrusion processing and address a range of processing application needs throughout the value-added agricultural industry. Discussions as well as actual demonstrations of both theoretical and practical issues related to the design and operation of extrusion processes are included. Registration fee for the course is $400 plus GST. Registration deadline is November 2. For more information, contact Connie Phillips at the Centre, (403)980-4865 or e-mail: **connie.phillips@agric.gov.ab.ca**

1999 Banff Pork Seminar

The 1999 Banff Pork Seminar (BPS) is being held on January 12 to 15, 1999 at the Banff Centre for Conferences. The theme of the seminar is Risk Factors to Profit and Growth. Seminar highlights include sessions on: how to survive and thrive in tomorrow's pork industry; solving problems of new barns and introducing new stock; production without risk to soil, water, air and human health; and, managing production for increases efficiency. The program also includes an opportunity to discuss current topics, a poster session featuring Alberta research activities and several interactive workshops. For more information, contact Banff Pork Seminar at (403)492-3236, fax: (403)492-9130, e-mail: **bps@agns.ualberta.ca** or, visit the BPS Internet site at: **http://www.afns.ualberta.ca/bps**

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51594 8467

Agri-News

October 12, 1998

Use resource centres to research agri-business ideas

Agriculture and Food Week is a great catalyst to encourage Albertans to stop by one of the many business and diversification resource centres across the province and research their agri-business ideas. The centres are there to help turn ideas into businesses.

Agriculture and Food Week, **October 12 through 16**, celebrates the contribution of agriculture and food industries in Alberta. "From our perspective, this week could also be the stimulus for rural entrepreneurs to look at how to venture into new agriculture and food businesses," notes Janice McGregor, rural development specialist – business with Alberta Agriculture, Food and Rural Development, Morinville. "We're encouraging people to come into a centre because they are designed for rural entrepreneurs to research new ventures," she adds.

Many of the centres are located in Alberta Agriculture offices. Some can be found in public libraries. A list of locations is attached.

Each resource centre offers clients a wide variety of information about how they can start or grow their agri-business venture. This includes business plan and marketing information as well as specifics on alternative livestock, horticulture, food processing and agri-tourism. Resources, from books to cassette tapes, can be borrowed free of charge.

"The centres complement the services and resources rural development specialists – business offer to rural entrepreneurs such as business start-up information and Ag-Venture industry profiles," says Marian Williams, rural development specialist – business, Camrose.

Cont'd on page 2

This Week is Agriculture and Food Week

Putting Harvest Back Into Thanksgiving

This Week

Use resource centres to research agri-business ideas 1

4-Her's promote "Alberta Made" 2

Meeting farm labour laws in the hog industry 3

Apples for Teachers 3

Prairie berries – Alberta's sweet success story 4

Ministers make recommendations on grain handling and transportation 5

Briefs 6

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

Each centre also includes an Internet kiosk where users can check what the worldwide web has to offer in their particular area of interest. An already established set of bookmarks can take them directly to sites already identified as useful and informative.

Some of the resource centres have been developed with the assistance and co-operation of other organizations in the community. For example, the Hanna centre is staffed by the Hanna Association for Life Long Learning, one of the centre partners. Other partners include the local Chamber of Commerce, Meridian Community Futures, the Hanna Public Library and Alberta Economic Development.

For more information, contact the local rural development specialist – business or call the local Alberta Agriculture district office to get connected.

Contact: *Cathy Wolters*
(403) 349-4465
Marian Williams
(403) 679-1210
Janice McGregor
(403) 939-4352

Rural Development Specialists – Business

- Linda Hawk, Hanna (403) 854-5500
- Sharon Homeniuk, Stony Plain (403) 963-6101
- Morley Kjargaard, St. Paul (403) 645-6301
- Tim Keating, Falher (403) 837-2211
- Kathy Lowther or Donna Fluery, Airdrie (403) 948-8537
- Elvira Smid, Medicine Hat (403) 529-3616
- Janice McGregor, Morinville (403) 939-4352
- Leona Reynolds-Zayak, Vermilion (403) 853-8101
- Lori-Jo Graham, Claresholm (403) 625-1445
- Lynn Stegman, Lacombe (403) 782-3301
- Jan Warren, Vulcan (403) 485-2236
- Marian Williams, Camrose (403) 679-1210
- Cathy Wolters, Westlock (403) 349-4465
  (Kerry Engel returns November 1998)

Resource Centre Locations

Except as indicated, the centre can be found at the Alberta Agriculture, Food and Rural Development district office.

Central

Airdrie – *public library*
Canmore – *public library*
Coronation
Hanna
Lacombe
Olds
Three Hills
Rocky Mountain House – *Memorial Public Library*

Northeast

Camrose
St. Paul
Sedgewick
Smoky Lake
Vermilion
Wainwright

Northwest

Leduc
Morinville
Stony Plain
Westlock

Peace

Falher

South

Claresholm
Medicine Hat
Vulcan
High River – *Highwood Business Development Centre*

4-Her's promote "Alberta Made"

Thirteen 4-H members were recently selected to promote Alberta food and beverage products across the province. These Alberta Made Ambassadors are part of a network promoting local industry, seeking growing markets for Alberta farm products, spurring community economic activity and creating jobs across Alberta.

"We chose Alberta's 4-H program to work with because it attracts people that are passionate about agriculture and their community. We've since learned how highly skilled and well-trained 4-H'ers are in communication and leadership. They are also eager to learn more about the capacity agriculture and food industry has for value-added initiatives," says Ken Gibson, president of the Alberta Food Processors Association (AFPA).

Early in October, the Alberta Made Ambassadors received training that included overviews of Alberta's food industry, providing quality service, developing a marketing plan, and dealing with the media.

Each Alberta Made Ambassador has been teamed with a local coach who works in Alberta's food industry. Together with their coach they will develop a marketing program for their community. Marketing activities may include: presentations to school, community and business groups, participation in local fairs, and sessions with grocers and restaurant owners. The coaches are encouraged to impart lessons beyond just the food industry to help the 4-H'ers develop an entrepreneurial attitude and form the beginning of a career network.

"We hope the program raises awareness of the impact the food and beverage industry has on Alberta's economy, as well as the variety and world-class quality of locally processed Alberta Made food and beverage products," adds Gibson. "Alberta's food and beverage industry needs a skilled, energetic and enthusiastic workforce to compete in our global *knowledge-based* economy. Another exciting feature of the Alberta Made

Cont'd on page 3

Ambassador program is exposure to the vast array of potential careers in food and beverage processing for the youth involved in the program."

Ambassadors receive a bursary during a 13 week internship. Upon satisfactory completion of their internship, the Alberta Made Ambassadors receive a matching bursary to attend a post-secondary institution in the province.

Contact: Ken Gibson (403) 444-2272
Carol Sullivan (403) 422-4H4H (4444)

Meeting farm labour laws in the hog industry

As the number of intensive livestock operations increases and the nature of farm labour changes, the laws governing farm workers are under examination. In Alberta, farm workers are not covered by standard employment laws. This means they are not guaranteed a minimum wage, compensation for overtime nor are they eligible for paid holidays or workers' compensation.

"In 1997, a survey of workers on Alberta hog farms was conducted by Alberta Agriculture, Agricultural Education and Community Services Branch to provide information on the working conditions in the industry," says Michelle Follensbee, tech-transfer specialist with Alberta Agriculture, Food and Rural Development.

The survey results represent 25 producers, mostly farrow-to-finish, with an average herd size of 539 sows. According to the survey, staff are paid at the following rates:

	Alberta Hourly Wages		**Alberta Monthly Wages**	
	Average	**Range**	**Average**	**Range**
Experienced Technicians	$9.69	$6 to 13	$1,883	$1,200 to 2,300
Technicians in training	$8.29	$6 to 11	$1,750	$1,600 to 2,000
Production Manager	NA	NA	$3,075	$2,000 to 4,400
Unit Manager	$14	NA	$2,360	$1,800 to 3,000

"The survey also showed that technicians received at least one day-off per week and 46 per cent of employers paid their employees for statutory holidays. Twenty per cent of employers provided workers' compensation coverage and 59 per cent reported sickness and accident coverage for staff with 50 to 100 per cent of the premiums paid by the employer," says Follensbee.

In 1998, Alberta Agriculture, Food and Rural Development and the Alberta Pork Producers Development Corporation commissioned a study on the socio-economic impact of hog operations in Alberta. Forty-four producers, mostly farrow-to-finish, were surveyed and farm size was represented according to the following categories:

- 11 per cent of the sample had less than 50 sows
- 30 per cent of the sample had 50 to 125 sows
- 16 per cent of the sample had 125 to 250 sows
- 43 per cent of the sample had greater than 250 sows

The average number of full-time employees on surveyed farms was 2.44. This number accounts for all paid employees including operators, full-time employees, part-time employees and paid family labour. The number of full-time employees ranged from 0.208 for the smallest farms to 5.1 for operations with greater than 550 sows. The average wage reported for full-time labour was $35,256 (ranging from $28,800 for full-time labour on farms with less than 50 sows to $36,454 for full-time labour on farms in the 50 to 125-sow category).

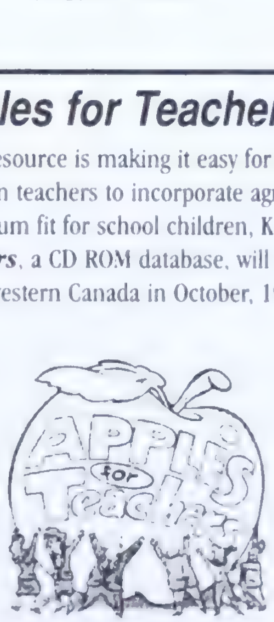
"Although these surveys only represent a moderate portion of the total Alberta industry, both clearly show that some hog producers are meeting and exceeding minimum labour standards," adds Follensbee. "Minimum wage in Alberta was increased to $5.40 from $5 per hour in October 1998.

"When assessing the current labour standards in the livestock industry, particularly the hog industry, it is important to note that stiff competition to attract and keep skilled workers has led to the use of competitive wages, benefit packages, training programs, company share opportunities and bonus programs. While the issue of regulating farm labour is being resolved it must be acknowledged that many producers and farm organizations already voluntarily exceed the minimum standards of labour and provide excellent opportunities for their employees."

Contact: Michelle Follensbee
(403) 415-0828

Apples for Teachers

A new resource is making it easy for Alberta and western Canadian teachers to incorporate agricultural information into curriculum fit for school children, K to 12. ***Apples for Teachers***, a CD ROM database, will be distributed to teachers across western Canada in October, 1998.



Cont'd on page 4

"We're excited about this resource. It features the new artwork and the new image for Ag in the Classroom," says Betty Gabert, Ag in the Classroom coordinator with Alberta Agriculture, Food and Rural Development, Edmonton. "The *Apples for Teachers* CD features all Ag in the Classroom resources, over 3,000 pages of information and background teachers can use and incorporate into lessons."

The CD is a product produced by Ag in the Classroom on behalf of the Western Canadian Agriculture Education Council, a working group of Manitoba, Saskatchewan, Alberta and British Columbia's Ag in the Classroom programs.

"The CD was designed to meet the curriculum needs of all four provinces involved," says Gabert. "It is a cooperative effort that progressed through several growing and developing stages before the Council was confident it would be a useful tool for western Canadian teachers.

"In the early stages, we took the CD to teachers' conventions to get their feedback on the CD contents and on 15 different CD jacket designs. We wanted to make sure that the artwork wasn't just eye-catching but was useful and informative. Alberta artist, Greg Huculak designed the jacket and it really combines art and utility, exactly what the Council wanted."

The *Apples for Teachers* CD is fully text searchable by word or phrase and has point and find features. It is a library of agriculture information, complete lesson plans, background resources, ideas for enrichment, applied science labs and story books that will help teachers build custom-made lessons. Teachers can select lesson plans by curriculum fit, grade level, themes or issues.

"To a great extent, young Albertans no longer realize the importance of agriculture in the province, to the economy and to our lifestyle," adds Gabert. "It's important to bring agriculture into our classrooms, and *Apples for Teachers* makes it easy for teachers and fun for students to learn more about agricultural industries. Ag in the Classroom programs foster awareness and understanding of agriculture and food so that future citizens will be prepared to make responsible decisions regarding the industry."

Apples for Teachers is sponsored by United Grain Growers (UGG), Agrium and Ag in the Classroom, Alberta. UGG and Agrium hope that the *Apples for Teachers* collection will inspire teachers to integrate the theme of agriculture with classroom activities for the benefit of western Canadian youth.

Contact: *Betty Gabert*
(403) 427-4225

Prairie berries – Alberta's sweet success story

Only a few years ago, it was difficult to find a farm or market gardener producing fresh fruit for sale in Alberta. That's been changing rapidly. Pick-your-own, pre-picked fruit, and large commercial operations have been advancing rapidly in the province.

"It is estimated that there are more than 350 producers of fresh fruit crops in Alberta at present," says Lloyd Hausher, provincial fruit crops specialist with Alberta Agriculture, Food and Rural Development. "Strawberries, saskatoons and raspberries are the major crops being produced, with commercial plantings of chokecherry, also known as wild black cherry, and black currants being established."

Although not the largest crop in acres planted, strawberries presently dominate the gross farm receipts of the berry industry in Alberta. More than 200 producers province-wide produce these berries on farms ranging from two to 28 acres. The majority of strawberries are sold pick-your-own or at the farm gate, with a limited amount sold through farmers' markets.

Two kinds of strawberries are produced in Alberta. The most common commercial-types are the *Junebearing* strawberry, that produces for about four to six weeks usually during the month of July under Alberta conditions, and the *day-neutral* strawberry, a true everbearer that produces from July until freeze-up. Most of the production from this plant is obtained in August and September. Alberta presently has the largest acreage of day-neutral strawberries in North America outside of Florida and California.

"Alberta's harsh winter has some benefits over other berry producing regions of North America," says Hausher. "Many insect and disease problems experienced elsewhere haven't surfaced here. Although yields may not be comparable to California, they have been steadily increasing and consumers are willing to pay a premium price for the taste, quality and freshness of locally produced berries."

Saskatoon (*mis-sask-quah-toomina*) orchards continue to be established in large acreages and are the first commercial or machine-harvested fruit crop on the prairies. This new berry-on-the-block, the Saskatoon soon proved itself as a commercially viable fruit crop.

"The first plantings of this fruit crop were established in the late 1960's and early '70's in the Peace River area and the Bowden-Carstairs regions of the province," says Hausher. "When these first plantings began to produce (usually three to four years after establishment) it became evident that they could be produced under orchard situations.

Cont'd on page 5

"Being a crop which was only years removed from the wild proved to be very challenging for a number of years. Disease, insect and weed control were early priorities and emphasis was placed on the development of management tools."

The saskatoon industry has two distinct segments. Direct market, which includes the pick-your-own and farm gate sales, and the larger commercial or machine harvest for a value-added market. Most direct market operations range in size from two to eight acres, while producers looking at machine harvesting have planted acreages ranging from 10 to 70 acres. Many growers are looking at expansion in the area of 160 acres. Presently there are approximately 20 Saskatoon harvesters in Alberta. While there remain many production challenges ahead of the Saskatoon industry, an increased effort is being directed toward the marketing area.

"Raspberry production also continues to increase in popularity," adds Hausher. Once a crop only produced in central Alberta, raspberry operations can now be found in all parts of the province. A new type of raspberry that produces fruit on current seasons' growth has allowed producers in the chinook zone of the province a reliable source of raspberry production. The *primocane* or fall-fruiting raspberry, of which four cultivars are now recommended through research evaluations, are mowed to the ground each spring and commence fruiting mid-August. Similarly to strawberries, most summer-fruiting and fall-fruiting raspberries are sold at the farm gate via pick-your-own."

On the horizon, black currants and chokecherry plantings are being established with machine harvest and value-added uses being evaluated.

Production of Alberta's prairie berries is expanding rapidly, facilitated by strong basic research, technology transfer and industry support. Many workshops, production school, and seminars are held yearly for both new and established growers. Information on prairie berries and planned workshops is available from the Crop Diversification Centre South (403) 362-1300.

Contact: Lloyd Hausher (403) 362-1309

Ministers make recommendations on grain handling and transportation

Ministers responsible for agricultural transportation in Western Canada today released their Phase II submission to the Head of the Grain Transportation Review, Mr. Justice Willard Estey.

Alberta's representatives believe there are several key recommendations to improve the integration and efficiency of the grain handling and transportation system, increase competition and address customer needs while improving farmer returns.

"One main point of this Review is to remove the inefficiencies in the system," said Walter Paszkowski, Minister of Transportation and Utilities. "We're recommending that the CWB institute a policy of calling for competitive tenders for delivery of Board grains, in response to the specific needs of each customer. That way, we reduce storage costs by putting into the system only the grain that the customer wants, in order to meet a specific contract and delivery date."

"Wherever possible, participants should rely on commercial contracts to pull grain through the system," he added. "This will ensure that responsibility and accountability go hand in hand."

The report indicates that we must increase competition in the grain handling system, and ensure that the efficiency savings are returned to farmers. "We believe that competition is required to ensure that the grain handling and transportation system is as efficient as possible," said Ed Stelmach, Minister of Alberta Agriculture, Food and Rural Development.

The Minister also expressed concern that failures within the system always come out of farmers' pockets, adding that it is time that farmer liability was capped.

The report contains a number of recommendations for Justice Estey:

- Grain marketers should actively monitor and manage vessel arrivals. When the CWB enters into contracts with terminals and customers for Board grains, it is imperative to ensure that the arrival of a customer's product at port closely coincides with the arrival of the ship carrying the grain.
- Restructuring of grain collection activities should be encouraged to create 25-50 car blocks of grain destined to one export terminal.
- Federal regulatory control over rate setting should remain in place until there is adequate evidence that federal rail policy is providing competitive outcomes. Having regulated rates will keep the rates lower for farmers.
- In order to promote competition at the farm level and in the "basis", grain companies should be allowed to attract Board grains directly from farmers to meet their contract commitments.

This report was part of the second phase of Justice Willard Estey's review of the Canadian grain handling and transportation system, to be completed by Dec. 31, 1998. Justice Estey is gathering information to develop recommendations and implementation plans to reform the system and to establish clear roles and responsibilities for all system participants. Alberta's submission is available through the Internet on Alberta Agriculture, Food and Rural Development's Internet website at: **http://www.agric.gov.ab.ca/ministry/consultations/grain_review/table.html**.

Cont'd on page 6

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51594 8459

Phase one of Justice Estey's report set out key issues and provided the basis for discussing ways to improve the system. Justice Estey was appointed in December, 1997, to conduct a comprehensive review in response to grain industry stakeholders. Over the course of the review, Justice Estey will examine all aspects of the system, including institutional, legislative and regulatory, physical, and operational issues.

Contact: *Ron Glen*
(403) 427-2137
Ray Bassett
(403) 427-1957
Brian Hlus
(403) 427-2080

Agri-News Briefs

November courses at Olds College

Olds College offers a ***Seed Technology Workshop*** on November 18 to 20, 1998. The seminar is of special interest to seed cleaning plant personnel, seed growers, seed trade members and company representatives, seed marketers and others interested or involved in the seed industry. The seminar features the latest in seed developments, markets and equipment use. Shared learning, new ideas and exchanges are the focus of this 1998 workshop. Registration prior to November 4 is $155 plus GST. Workshop fee after November 4 is $180 plus GST.

Also this fall, the College offers a three-day ***Seed Protectant Pesticide Applicator Certificate*** course. The course runs November 25 to 27, 1998 and covers topics such as pesticide safety, diseases, seeds act, spill prevention, disposal, calculations, seed protection chemicals, formulations, legislation, transportation, equipment calibration and warehousing standards. The course ends with a Pesticide Applicator Certification exam. It is not mandatory to write the exam while at the College. It can be written at various locations throughout Alberta during the year. Course fees are: before November 12 – $250 plus GST, after November 12 – $275 plus GST. For further information or to register, contact Olds College Extension Services at (403)556-4684.

Early registration for 1998 Hort Congress

Early registration for the 1998 Alberta Horticulture Congress ends October 17, 1998. Market gardeners, greenhouse growers, landscape and nursery operators, fruit growers or flower and herb growers planning to attend the Congress are encouraged to take advantage of the early registration. Early registration is $95 plus GST. After October 17, registration fee is $175 plus GST. The Congress is offering 62 technical sessions and a featured keynote speaker. Programs and registration forms are available by calling the Congress office at (403)415-2324.

Leaders Challenge conference

The theme of the upcoming Leaders Challenge conference is ***Agri-Industry: Boundless Growth?*** The conference is being held at the Capri Hotel and Convention Centre in Red Deer on January 22-23, 1999. *Agri-Industry: Boundless Growth?*, a follow-up to the January 1997 Leaders Challenge conference *Seizing the $20 Billion Opportunity* organized by the Agriculture and Food Council, will focus on where the industry is headed and where the boundaries to growth are likely to be in the future. The conference provides an opportunity to not only meet other industry representatives but customers, government representatives and potential partners. Current issues, trends and the latest successes in Alberta's Agri-Industry, as well as challenges of the shifting and emerging boundaries of the industry will be explored. Delegates have the chance to: hear from industry experts on key topics, participate in media sessions on important issues facing the industry, and visit value chain displays. Areas for discussion include emerging industries such as bio-tech and functional foods, value chains, implications of the Post Crow era, investment and finance, niche marketing, food safety, and the latest on global trade negotiations. For further information, contact Don Diduck at the Alberta Congress Board at (403) 421-9330, e-mail: **congress@sas.ab.ca**

Agri-News

October 19, 1998

Record honey crop

Despite problems in a few areas, a mild winter, a good spring, timely rains and good beekeeping all contributed to provide Alberta's beekeepers with a record honey crop.

"The mild winter of 1997/98 provided ideal conditions for beekeepers to keep their bee colonies alive from October through to spring," says Kenn Tuckey, provincial apiculturist with Alberta Agriculture, Food and Rural Development. "For the last few winters, over-winter colony losses have averaged about 20 per cent. This year, beekeepers reported losses of only about 10 per cent. Honeybee colony numbers in Alberta are expected to be 10 per cent higher than last year, simply as a result of this unexpected improvement in wintering. Even more important than the level of losses is that this spring, the colonies were much stronger, on average, with very few of the weak colonies that often fail to prosper.

"This spring, the weather continued to favour beekeepers, just as it favoured other aspects of agriculture. The warm temperatures allowed the bees to easily expand their brood nests and to produce large populations of honeybees well ahead of the normal schedule. As it turned out, this was fortunate because many of the honey plants also bloomed ahead of schedule. Indeed, in 1998 many beekeepers started extracting their honey crops in June, at least two weeks earlier than any previous year."

The spell of dry weather during June raised concerns for many beekeepers. Since the nectar that the bees collect from the flowers is about 80 per cent water, adequate ground water supplies are as important to beekeepers as they are to other farmers. The rains late in June came just in time to sustain the nectar flow through the summer

"Ideal conditions only work if beekeepers are prepared for them," adds Tuckey. "Alberta's beekeepers have been very careful to test for and protect their bees from diseases and the two species of parasitic mites that are gradually becoming established all through the province. In addition, beekeepers recognized and reacted appropriately to the early season. This year, beekeeping by-the-calendar would have been disastrous. A great deal of the honey crop would have been missed and many colonies would have swarmed."

In a few areas of the province, beekeepers suffered loss of honeybee populations because of the inappropriate spraying of canola fields to control lygus bugs. When the honeybee field force is killed, the colony is no longer able to gather a surplus crop of honey. In some cases, the beekeeper's crop was reduced by at least 100 pounds for each affected colony.

Cont'd on page 2

This Week

Record honey crop 1

Manure: let's not waste the resource 2

Safety? It's Cool! 3

Risk management information – Right Now! 3

Weaning time 4

Briefs 4

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

Alberta's colony count will be up from 1997, to approximately 200,000 colonies. Except for the colonies devoted to pollination, it appears that the average Alberta honey crop will be up to approximately 200 pounds per colony (compared to 135 pounds in 1997, and a 30 year average of 141 pounds). In one area, beekeepers reported crops of only 100 pounds per colony, but many areas reported crops up to 350 pounds. The total honey crop will be somewhat over 30,000,000 pounds.

"Zeneca Seed Company and AgrEvo are both involved in producing hybrid canola seed in southern Alberta," continues Tuckey. "For these crops, bees are required to carry pollen from the male plants to the female plants. Two or three colonies of honeybees are required to ensure adequate pollination per field. During 1998, some 40,000 colonies of honeybees were devoted to this important aspect of beekeeping. As it happens, canola pollination must be done at the same time as the normal honey flows in the rest of the province. Because of the heavy bee population, and the lack of any other nectar sources in the areas, these honeybee colonies produce only a minimal honey crop, perhaps 35 pounds per colony. To compensate for the honey loss, beekeepers are paid a fee for the pollination work. Both companies express a desire to expand their operations but they are limited by the number of honeybee colonies available."

Provincial apiculturist Kenn Tuckey, stationed at the Crop Diversification Centre North, and apiculturist Doug Colter, stationed in Falher, provide support service to the Alberta beekeeping industry. They are involved in inspecting and testing bee hives and colonies for diseases and parasitic mites. As well, they provide direct assistance to Alberta's beekeepers and to would-be beekeepers. People with an interest in beekeeping in Alberta are invited to contact them for information.

A new beekeeping book is being produced by Alberta Agriculture, Food and Rural Development. The new book will soon be available from the Publications Office of Alberta Agriculture, 7000 - 113 Street, Edmonton, Alberta T6H 5T6 or by calling 1-800-292-5697.

Contact: *Kenn Tuckey*
(403) 415-2314
kenn.tuckey@agric.gov.ab.ca
Doug Colter
(403) 837-2211
doug.colter@agric.gov.ab.ca

Manure: let's not waste the resource

The first week of November offers a tremendous opportunity for livestock operators to learn more about manure and its value as a resource. Four workshops throughout Alberta have been set up to discuss various issues related to manure management. The workshops are intended to help producers maximize the benefits of this natural resource, while minimizing negative impacts on soil, water and air.

Dr. Jessica Davis, soils scientist from the Colorado State University, is contracted through Agri-Food and Agriculture Canada to provide a perspective on this issue of manure management at the workshop. Her research is in the area of manure as a fertilizer for crops. As well, she has dealt with the water quality issues as they relate to manure management. Working with feedlot, dairy, swine, layer and broiler manures, Davis has determined optimum application methods and rates while protecting both ground and surface water quality.

Various organizations are taking advantage of Davis' visit in Alberta and have invited other speakers to present additional topics of interest to producers resulting in a full day agenda on manure issues.

"In southern Alberta the workshops targeted at feedlot operators are being held on November 3 in Picture Butte and November 5 in Cheadle," says Karen Yakimishyn, regional conservation coordinator with Alberta Agriculture, Food and Rural Development. "**Maximize the Benefits of Your Feedlot Manure – Feedlot Tour & Workshops** discusses issues relating to feedlot manure management. Tips on how to develop feedlot manure management plan and discussion on the best management practices for feedlot manure will be part of the agenda."

For either of these sessions, contact the County of Lethbridge at (403) 381-5801 or Alberta Agriculture in Strathmore at (403) 934-3355 for more information.

Two awareness workshops for livestock producers called **Manure: Let's Not Waste The Resource** are scheduled for the central and southern regions. The first workshop will be held on November 4 in Claresholm and the second workshop on November 6 in Red Deer. Other agenda items, in addition to Davis, include **Being a Good Neighbour, Best Management Practices for Manure, We all Live in a Watershed (A Look at Water Quality)** and an update on the Code of Practice.

For more information on these events, call the Alberta Agriculture Offices in Lethbridge at (403) 381-5126 or Red Deer (403) 340-5364.

Contact: *Karen Yakimishyn*
(403) 340-5325

Safety? It's Cool!

It's Cool to be safe! ***It's Cool*** to practice safety! ***It's Cool*** to be on the safe side of things! ***Safety? It's Cool!***

It's Cool is the theme of the new farm safety promotion organized by the Farm Safety Program and sponsored by PanCanadian Petroleum Limited, and the Canadian Broadcasting Corporation. The promotion is aimed at Alberta teenagers. Teenagers often help with chores, working in barns and on heavy machinery. Farm work can be dangerous and teenagers shouldn't take unnecessary chances. That's the message that will be sent from their peers ... teen to teen.

"Teens talking to teens is more effective than adults telling teens what to do," says Solomon Kyeremanteng, head of the Farm Safety Program with Alberta Agriculture, Food and Rural Development. "When teens get to work on a project like this, it has a long-term impact on the way they think about safety. Past experience has shown clearly that 'peer counselling' works."

Alberta's rural high school students are being challenged to use their creativity to script and shoot a 30 second television commercial on a farm machinery safety or livestock handling safety.

"The student or students who produce the best overall commercial will win a $2500 scholarship towards their post-secondary education and their school will win a new video recorder," says Kyeremanteng. "The winning commercial will then be professionally produced and will air in the spring during Hockey Night in Canada. Second and third place winners receive $1500 and $1000 scholarships, respectively."

A contest information package is being sent to all rural Alberta high schools in November. The contest begins in November and submissions should be sent to Solomon Kyeremanteng by March 31, 1999. Information packages are also available by contacting the farm safety program at (403) 427-4227.

"PanCanadian is a solid member of Alberta's rural communities, where we operate hundreds of oil and natural gas wells. Many of the safety practices our employees use everyday were first learned when they worked on farms in their youth," says John O'Donnell, PanCanadian's manager of Corporate and Community Relations. "PanCanadian is pleased to sponsor *It's Cool*, which will help Alberta's farmers, both young and old, increase the safety of their operations."

"As a partner in this excellent farm safety educational program in Alberta, and as a broadcaster to all regions of the province, we welcome the opportunity to promote and broadcast the farm safety message to all those involved in farming and agriculture," Brian Gray, regional sales manager, CBC Television. "CBC Television is very proud to be involved in this project and looks forward to a long term commitment with our farm safety partners, PanCanadian Petroleum Limited, Alberta Agriculture, rural high schools and their students and the farm communities of Alberta."

Submissions can be mailed to:

Alberta Farm Safety Program
#201, 7000 - 113 Street
Edmonton, AB T8C 1B8

Contact *Solomon Kyeremanteng* *Alan Boras*
(403) 427-4227 *(403) 716-4040*
Brian Gray
(403) 468-2352

Risk management information – Right Now!

Due to the overwhelming response to the pilot issue of *Right Now!*, the Farm Business Management Program (FBMP) is publishing a second issue, scheduled to be in Alberta rural mailboxes in October.

"Response to the Spring 1998 issue of *Right Now!* was very positive," says FBMP provincial coordinator Anita Lunden. "We received hundreds of reply cards from farm managers who read the magazine and wanted to know more. They also told us to be sure they received the next issue."

The Fall 1998 *Right Now!* deals with the topic of risk management. Risk management is a process for dealing with all of the variables that exist in the volatile world of agriculture There are many factors that impact on a farm business, some of which a farmer has control over, and some totally outside his control. Risk management is not meant to eliminate risk entirely, but to manage risk to an acceptable level for effective farm performance.

"Articles in the magazine profile farm managers who have seen risk as an opportunity and used creative tools to help them minimize the highs and lows of the agriculture industry," says Lunden. "Every article contains tips and hints that can be applied to a farm operation, right now! As well, readers have the opportunity to write in for more information on the topics discussed."

FBMP is combining the fall issue of *Right Now!* with its fall Program Guide.

"In past years, the program guide, containing all of the learning opportunities sponsored by FBMP, has been sent to Alberta rural mailboxes on its own," adds FBMP coordinator Nan Bartlett. "This fall, it will be a pull-out supplement to the *Right Now!* magazine. Farm managers will receive a learning tool in their mailboxes, as well as a calendar of learning events taking place all over Alberta in the months ahead."

Alberta farmers should find a copy of *Right Now!* with the program guide insert in their mailboxes before October 23 Anyone not receiving a copy, should call 310-0000 and then dial 556-4218 for toll free access, to request a copy

Contact *Anita Lunden* *Nan Bartlett*
(403) 556-4278 *(403) 835-4288*

Weaning time

For the last few weeks, many quality 1998 calves have changed hands at local auction markets and moved to be wintered, grassed and/or finished and marketed in 1999. Some producers, however, retain their calves and winter them on the farm.

"Retained calves need to go through a battery of management steps to reduce or eliminate weaning stress that can result in digestive problems, respiratory ailments, reduced daily gains and in extreme cases death," says Bill Grabowsky, beef specialist with Alberta Agriculture, Food and Rural Development, Wetaskiwin. "It is advisable, and an encouraged practice, to pre-wean calves two to three weeks prior to the actual weaning date to reduce weaning stress."

There are several steps involved to aid success in weaning. These include:

- try to predetermine the weather. Aim for an extended period of dry, cool, stable weather conditions. Extra stress can be caused during pre-weaning when the calves must also experience rain or snowfall at the same time;
- handle calves with the least amount of noise and sorting stress. Good facilities are a must. Once calves are weaned, lots of dry bedding, water and palatable feed (medium quality hay) should be available;
- if calves are placed back on stockpiled grasses, put them in with a few older cows. The older cows seem to help the calves adjust to being weaned. Feed introduction in the pre-weaning period also helps calves adjust when actual weaning takes place;
- vaccinate the calves with a recommended series of inoculations. Remember to keep records of all vaccines used and try to needle only in the right places;
- feed bunk management is critical when dry-lotting calves. Remove stale feed so all calves have a balanced, nutritious ration available at all times. Feed could be available in a creep feeder or by restricting a large feeding area to calves only. Feed changes should be made gradually and not abruptly. Lots of quality water is needed; and,
- provide a hospital pen for any sick calves. Accurate records for temperature, drugs and treatment should be kept for each calf. Pre-weaning stress can bring on respiratory problems and, if caught early, minimal losses will result.

"The suggestions listed are by no means complete," says Grabowsky. "They should be considered a start only. Producers need to make their own weaning decisions that fit their weaning program. Reducing sickness and any losses from weaning stress does have a major impact on profits, so producers will want to pay close attention to their calves at this time of year."

Contact: *Bill Grabowsky*
(403) 361-1240

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51594 8335

Agri-News Briefs

People, pastures & profits

Alberta Forage Council, in conjunction with Alberta Agriculture, Food and Rural Development, is sponsoring the second Western Canadian Grazing Conference, being held on December 2 and 3, 1998 at the Mayfield Inn, Edmonton. The two-day conference is designed for producers wanting to improve their pasture production knowledge and techniques. The conference theme is People, Pastures & Profits, and is aimed at helping farmers get more pounds and profit from pastures. Speakers include experienced grass farmers, researchers and forage specialists from the western provinces and the U.S. Participants can choose the sessions that interest them; poster presentations from western Canada's forage and research associations provide examples of grazing-related trials and demonstrations; and, a trade show features pasture-related exhibits. Complete registration fees for the event are $100. For more information or to register, contact Lorene Cunningham at the Alberta Forage Council office (403) 443-7544, e-mail: abforage@telusplanet.net, or fax: (403) 443-7530.

Agri-News

October 26, 1998

Good heat in 1998 growing season

The April to August average growing season temperature in 1998 was 1.9 degree warmer than the average for the 1961 to 1990 period. The province averaged 262.8 mm of precipitation, 13.1 mm below the long term average.

"Albertans's enjoyed summer-like weather in April and May with well above normal temperatures and near normal precipitation," says Peter Dzikowski, agri-weather specialist with Alberta Agriculture, Food and Rural Development. "From a crop perspective, the warm dry spring allowed producers to seed early."

May started with daytime temperatures reaching around 30 degrees. Temperatures returned to slightly above normal the second and third week of May. The warm dry weather continued to the end of the month creating water supply concerns of emerging crops and pastures.

In early June, a light frost with minimal damage occurred as result of the near zero degrees temperatures in northern and eastern Alberta.

"During the first three weeks of June, a pattern developed with showers covering most of the southern and central regions, leaving the northeast, northwest and Peace regions dry," says Dzikowski. "During the last week of June, the first widespread rain of the growing season covered the southern two thirds of Alberta."

In June, precipitation totals of 50 to 125 mm were reported in southern and central regions. The northeast region reported between 25 and 50 mm. The Peace region remained dry with isolated showers of 0 to 25 mm. The late June showers provided timely moisture for crop growth in many of the dry areas.

"Excess moisture in south and central Alberta slowed haying operations in July, while the northeast and Peace regions remained dry," adds Dzikowski. "July started with near normal daytime temperatures, changing to above normal temperatures during the second week. Temperatures cooled to slightly below normal by mid-July The above normal temperatures returned for the last part of the month. July temperatures ranged from slightly above normal to three degrees celsius above normal. This, followed with warm sunny weather in August, provided good harvest weather."

Cont'd on page 2

This Week

Good heat in 1998 growing season 1

Transfer of Brand Inspection services nears completion 2

Hort Congress – a whole lot to offer 2

What to feed the cows? 3

Native Plant Summit IV 3

Netherlands and Alberta sign formal agreement 4

Fall weed control 4

Briefs 5

Growing degree day totals from April 1 to September 30 were about three to four weeks ahead of normal in Alberta, contributing to early crop maturity and allowing for the early harvest with little concern about fall frost.

Although frost was reported in parts of the Peace and southern regions on September 19, the first widespread killing frost occurred on September 29 and 30. That's about two weeks later than the average first fall frost date for most agricultural regions of Alberta. Temperatures dropped to between 0 and - .7 degrees. The frost was followed by warm, dry weather until the end of the month providing ideal harvest weather.

"In many parts of the province conditions differed quite a bit from what the provincial averages show," continues Dzikowski. "For example, the growing season precipitation at Stavely West was 547.2 mm, 214 per cent of its long term average. This was typical for much of southern Alberta and the western half of the central and north west regions.

"In contrast, Peace River received only 113 mm which was half of it's normal precipitation. These averages are based on data recorded at 49 Environment Canada climate stations across Alberta."

More details regarding Alberta's weather can be found on Alberta Agriculture's internet site at:
http://www.agric.gov.ab.ca/

Contact: Peter Dzikowski
(403) 427-3594

Transfer of Brand Inspection services nears completion

As of November 1, 1998, Brand Inspection services will be transferred from Alberta Agriculture, Food and Rural Development to the cattle industry. The announcement of this change was made on October 13, 1998 by the Minister of Agriculture, Ed Stelmach, and Dale Wilson, the Chairman of Livestock Identification Services (LIS) Ltd.

The Act, Cabinet regulations and the delegation agreement providing for the transfer of Brand Inspection services to LIS are in place and the transfer will take place at 12:01 a.m. on November 1, 1998.

"I am pleased that the negotiations between Alberta Agriculture and LIS have reached a successful conclusion on a delegation agreement," says Stelmach. "This Government continues to get out of the business of being in business. Brand Inspection is a commercial service to the cattle industry, paid for by the cattle industry."

LIS is a not-for-profit corporation formed by Alberta livestock associations to operate the Brand Service. The founding members are:

- Alberta Auction Markets Association
- Alberta Cattle Commission
- Alberta Cattle Feeders' Association
- Alberta Livestock Dealers and Order Buyers' Association
- Feeder Associations of Alberta
- Western Stock Growers Association

LIS will perform virtually all of the same functions currently done by the Brand Inspection Service. The important exception is that the Minister of Agriculture will remain responsible to the Legislature for the related provincial acts and regulations that provide the foundation for the Service. This responsibility cannot be delegated.

Brand staff with Alberta Agriculture have received their formal notices and, for those who are eligible, details regarding severance options.

"Alberta Agriculture officials have done everything possible to ensure the staff have been treated fairly and that the Government has met its obligations under the Master Agreement with the Alberta Union of Public Employees," says Cliff Wulff, special projects officer with Alberta Agriculture. "All affected employees have been provided with detailed information on their rights and entitlements under the Master Agreement and with a number of contacts for assistance during this time of transition. All affected staff have had and will have the opportunity to look for jobs with other employers, including LIS."

"All those involved in these negotiations have done a good job in seeing them through," adds Stelmach. "All the criteria that were set out have been met. Staff have been treated fairly, and the concerns of the cattle industry have been addressed."

"At the outset, producers should not notice any real difference in the service they receive, nor in the fees charged," says Wilson. "LIS intends to consult with industry to consider any improvements to make the Service more responsive to industry needs, and prior to new fees being implemented."

Contact: Cliff Wulff
(403) 255-2459

Ken Weir
General Manager, LIS Ltd.
(403) 422-6256

Hort Congress – a whole lot to offer

Saskatoon and chokecherry production is a growing industry, reports the Fruit Growers Society of Alberta. With any industry, there comes a time when cooperative efforts are needed to advance the industry to the next level of success. Gary Storey, professor at the Department of Agricultural Economics, University of Saskatchewan, recently reported that it is important for industry players to recognize the need for collective action.

Cont'd on page 3

"Storey is one of the keynote speakers at this year's Horticulture Congress," says Sharon Faye, horticulture resource officer with Alberta Agriculture, Food and Rural Development, Edmonton. "The 1998 Hort Congress focuses on many aspects of the horticulture industry and many crop types, prairie fruit is an expanding part of the industry and is receiving considerable attention from growers."

The Congress, held at the Mayfield Inn, Edmonton on November 12 to 14, 1998, offers 62 technical sessions on topics ranging from getting started growing and selling culinary herbs to perennial trends; standard production systems in the U.S. to roses and gerberas; branding perennials to opening the farm gates to tourism.

"The agenda for the Congress is varied and is one of the most impressive put together," adds Faye. "All aspects of the industry will be dealt with in one or more of the sessions. Whether growers are interested in programs available, how to get started, how to manage and prioritize, how to market, grow more and sell more, there will be something for all professional greenhouse growers."

Programs and registration packages are available by calling the Congress office at (403) 415-2324. Registration fee for the three-day Congress is $175 plus GST.

For information on commercial fruit sessions, contact Don Fossum (403) 467-6992 or Nadine Stielow (403) 998-0481, both members of the Fruit Growers Society of Alberta.

Contact:	*Sharon Faye*	*Shirley Alton*
	(403) 422-2961	*(403) 415-2324*

What to feed the cows?

What is the most cost effective way to feed cows during the winter months? Is it hay, straw and grain, chaff and silage or snow balls and fresh air? This question has probably been asked many times. Now is a good time to think about what livestock will eat this winter.

"As with most questions there is no easy answer, but that's a good thing," says Lorne Erickson, forage specialist with Alberta Agriculture, Food and Rural Development, Rimbey. "A shortage of easy answers keeps us all searching for other possibilities, and, if everyone used the same solution to the winter feed problem, the commodities that supplied that solution would become very expensive."

Two things that determine the ideal winter feeds are the cows and the resources available to either produce or buy feeds. In other words, the most cost effective choice of feeds will be different for every farm or ranch and may vary from year to year.

"Optimally, cost effective feed means being able to use the lowest cost ration that enables animals to meet their production potential," adds Erickson. "A 1,100 pound cow calving in May can be expected to behave like a buffalo and graze through snow all winter some years and part of the winter in other years as long as enough good quality feed is left under the snow. This is a very low cost feed program but the output is also low compared to a 1600 pound cow calving in January. This cow has a much greater production potential and naturally requires a greater quantity and a higher quality feed input to reach that potential."

What is the best feed for your livestock? In order of quality and cost from lowest to highest, the most common feed choices are: chaff, straw, hay, silage and grain. Winter grazing of grasses and legumes will likely fall somewhere between straw and silage depending on what is under the snow. The feed quality of winter grazed swaths can range from poor hay to good silage depending on maturity of the crop at cutting.

The lower output (LO) cow can do well on the lower end feeds; chaff, straw, winter grazing and hay, but the higher output (HO) cow must rely more on the high end feeds; swath grazing, hay, silage and/or grain. The challenge is to design a feed program for the HO cow that is as cost effective as for the LO cow when production is taken into account. On the other side, too many high end feeds for the LO cow will not be as cost effective because she cannot produce enough to pay for them.

"In summary, LO cows must be wintered mostly on low cost feeds with higher valued feeds used as supplements to meet nutrient requirements," concludes Erickson. "The HO cow will require the higher cost feeds, with low cost feeds added when conditions will allow it, to reduce costs. Maximizing the length of the grazing season with stockpiled grass or swath grazing is likely as important as making a wise choice of feeds in controlling costs."

Contact: *Lorne Erickson*
(403) 843-2201

Native Plant Summit IV

Alberta's native plants will be the topic of discussion at the Native Plant Summit IV, being held at the Sheraton Cavalier Hotel, Calgary, on November 2 to 4, 1998.

"Native plants are becoming popular for low maintenance garden plantings in private yards and public places, such as parks and schools," says Suzanne Gill, land reclamation specialist with Alberta Agriculture, Food and Rural Development. "Native species are also often used to re-vegetate oil and gas disturbances and improve the environment when an area is reclaimed after a disturbance."

Native plants are those species that were found in Alberta pre-European settlement. They include grasses, wildflowers, shrubs and trees. Currently, Alberta's native plant industry is

Cont'd on page 4

in its infancy and while there is a high demand for reasonably priced local native plant material and seed, the supply is low.

"There is a need for high quality, reasonably priced seed of adapted native plant varieties," says Gill. "The conference will focus on the many topics surrounding this industry and will hopefully act as a catalyst, generating interest in this growing industry."

Topics being covered at the conference include:

- getting a local native plant industry up and running;
- production issues for native grasses, broad-leaved species, shrubs and trees; and
- planting methods, site selection, weed control, harvesting, seed cleaning and storage of native species.

A group of provincial government and private industry interests has organized the conference in conjunction with the Northern Great Plains Native Plant Committee. The committee is dedicated to the enduring benefit of the Northern Great Plains. Their goal is to conserve, protect and enhance native plant communities. In an effort to enhance biodiversity benefits, they promote the establishment of native plant material on public and private lands. This vision will be greatly enhanced through the development of adequate supplies of high quality, reasonably priced seed of adapted native plant varieties.

"The U.S. has moved ahead on many of their native plant issues and the conference is drawing on their experiences with speakers from Minnesota, Washington, D.C., Nevada, Montana and North Dakota," adds Gill.

Conference and registration information is available by contacting the conference administrator, Gail Millman at (403) 444-6336, Edmonton.

Contact: *Suzanne Gill*
(403) 427-4655

Netherlands and Alberta sign formal agreement

On September 21, 1998, a Memorandum of Understanding (MOU) between Agrotechnological Research Institute (ATO-DLO), Netherlands, and the Food Processing Development Centre (FPDC), Alberta was signed.

"The MOU formally establishes an exchange program between the ATO-DLO and the FPDC that will see research scientists from both countries visit and work with one another," says Barry Mehr, assistant deputy minister of production and marketing, Alberta Agriculture, Food and Rural Development. "The official signing by Doug Radke, deputy minister of Alberta Agriculture, Tjeerd Jongsma, head of food and food processing at ATO-DLO and myself, formalized the exchange program that began in April 1997 with a four month secondment of Connie Phillips, extrusion specialist at FPDC to ATO-DLO."

ATO-DLO is an organization involved in fundamental and applied scientific research for agriculture and horticulture. It was founded in 1989 and targets research activities to enhance the value-added aspect of agricultural and horticultural materials. ATO-DLO's three main areas of focus are: optimizing products and processes in agricultural and industrial production chains; developing food processing technologies and food products; and, developing non-food, industrial processing technologies and products based on renewable agricultural raw material.

ATO-DLO has a staff of over 600 research workers, including 250 scientists. The institute's buildings house over 50 laboratories and three technology halls.

"The opportunity to work closely with and share research findings and technology with such an advanced and progressive institute is an amazing opportunity for Alberta's agricultural industries," adds Mehr. "We were very pleased to host the ATO-DLO delegation during September are looking forward to the signing ceremony taking place in Frankfurt, Germany on November 3, 1998 at the Food Ingredients Europe Show. Hank Huizing, director of ATO-DLO, will be singing on behalf of that organization. We anticipate a long-standing, productive association with ATO-DLO in the future."

Currently, Miriam Quataert, scientist with ATO-DLO, is working at the FPDC for a three-month period, on a project evaluating functional ingredients in pasta products. The project is partially funded by the Western Economic Partnership Agreement (WEPA).

Contact:	*Barry Mehr* *(403) 427-2442*	*Connie Phillips* *(403) 980-4865*

Fall weed control

This year's early harvest is providing farmers extra time and opportunity for fall weed control.

"There are three types of weeds to look for when considering weed control options: annuals, winter annuals and perennials," says Trevor Schoff, cereal and oilseed specialist with Alberta Agriculture, Food and Rural Development, Camrose. "Annuals include weeds such as wild oats, wild buckwheat and chickweed. Annual weeds have already done their damage, they have competed with crops and, in most cases, have already produced seed. The freezing temperatures just around the corner will finish off any annual weeds that are still growing."

Winter annuals, weeds such as stinkweed, flixweed, shepherd's-purse and narrow-leaved hawk's-beard, can germinate in the spring and produce seed the same year.

Cont'd on page 5

However, they often germinate in the late summer or fall, overwintering as a rosette and then produce seed the following year. These weeds are small and may not look threatening right now, but as soon as the ground thaws in the spring, they will grow and develop a strong tap root.

"It is much easier to kill winter annuals in the fall," says Schoff. "If daytimes remain warm, winter annuals can be controlled until freeze-up. Leaving control as late as possible allows the maximum number to germinate. An application of 2,4-D is a cost effective method of weed control. Rates as low as 0.34 litre/acre of 2,4-D amine 500 effectively control stinkweed and shepherd's purse. Narrow-leaves hawk's-beard requires 0.57 l/ac. Glyphosate at 0.51 l/ac is also effective on most winter annuals."

Perennial weeds include quackgrass, Canada thistle, perennial sow-thistle and dandelion. They regrow from an established root system each spring and nutrients and water flow within the perennial plant from the root to the top of the plant. This upward flow from a large, established root system makes it difficult for herbicides to move into the root system and effectively control the plant in the spring.

"Late summer and fall movement in the perennial is from the top down into the root system, as the plant builds food reserves in the roots for the following year. Herbicide control is more reliable at this time of year because more herbicide reaches the root system," says Schoff. "In years when crops are removed early, opportunities to spray perennials after harvest provide very successful weed control with glyphosate as long as the perennials are actively growing and have enough regrowth to adequately absorb the herbicide."

Glyphosate products can be used to treat perennial weeds up to and after a mild frost. Generally, rates of one litre per acre are adequate. Glyphosate must be applied three to five days prior to a 'killing' frost. Dicamba products alone, or in combination with glyphosate, for thistle control must be applied two weeks prior to a killing frost.

"Tillage can be an effective method for winter annual weed control, however, it isn't very effective on perennial weeds," adds Schoff. "Herbicide application can be a cost effective method of fall weed control and also allows stubble to be left standing to trap snow and prevent erosion."

Contact: *Trevor Schoff*
(403) 679-1210

Agri-News Briefs

Success by Design

Five new factsheets have been produced by Alberta Agriculture, Food and Rural Development for the *Success by Design* series of publications. The factsheets include: **Guidelines for Conducting Business in a Meeting** – Agdex #1922-31-1; **Effective Meetings** – Agdex #1922; **Effective Leadership** - Agdex #1912-1; **Effective Committees** – Agdex #1921-60; and, **Working With Volunteers** – Agdex #1926-30. The *Success by Design* series provides information to organizations and community groups to help them manage more effectively and efficiently. *Success by Design* factsheets are available at all Alberta Agriculture offices and from the publications office, 7000 - 113 Street, Edmonton, AB T6H 5T6.

Feed peas for sale

The Alberta Pulse Growers have launched a Feed Peas for Sale listing on the internet. Buyers and sellers of feed peas can access the listing at the address: **www.pulse.ab.ca**
The website is also linked through Alberta Agriculture, Food and Rural Development's internet site, at: **www.agric.gov.ab.ca** Feed peas are a proven feed ingredient that maintains performance and meat quality. The new Feed Peas for Sale listing lets pea traders, brokers, feed manufacturers and livestock producers know where there are feed peas available. Sellers can list their peas at their local Alberta Agriculture district office or can put their information directly on-line on the pulse site. For further information, contact the Alberta Pulse Growers Commission at (403) 986-9398, Leduc.

1998 Farmer of the Year

Each year, the Alberta Society for the Prevention of Cruelty to Animals (SPCA) looks for a full-time farmer who takes exceptional care of the animals in their care. This year, **Colleen and Dylan Biggs**, cattle farmers from the TK Ranch south of Coronation, were named the 1998 SPCA Farmer of the Year. The Biggs use a low-stress technique developed by Bud Williams to move animals. The end result is a calmer herd and this reduces the frequency of sickness and dependence on medication as well as increasing farm profitability. The Biggs have made stress management an integral part of their herd health program and have made it the cornerstone of the quality control parameters in place for their Thomas Koehler Meats label. They are committed to their low-stress program and Dylan Biggs teaches low-stress handling techniques to others.

Manure management program

Alberta cattle producers are invited to attend manure management workshops, hosted by the Lethbridge Research Centre (LRC). The workshop, Maximize the Benefits of your Feedlot Manure, will be held in two venues on November 3 at Picture Butte and on November 5 at Cheadle. Each session begins with a morning tour of a local feedlot. Topics being covered include: an overview of soil, water and air concerns; update on the new Code of Practice for Responsible Livestock Development and Management; tips on how to develop a feedlot manure management plan; and, the best management practices for feedlot manure. The workshops are financially supported by the Canada Alberta Beef Industry Development Fund Visiting Scientist Program. Workshop cost is $20 per farm unit, to a maximum of three people. To register for the Picture Butte session, call the County of Lethbridge (403) 381-5801 and to register for the Cheadle session, call Alberta Agriculture, Food and Rural Development in Strathmore at (403)934-3355.

Alberta farm writers acknowledged by peers

Six members of the Alberta Farm Writers Association (AFWA) were recently presented awards at the Canadian Farm Writers Federation (CFWF) Annual Conference and Awards Banquet. Among the award recipients were: Pete Montana from RD-TV, silver award for his program - 'Pigs in Your Space'; Diane Finstad of RD-TV, bronze award for her program - 'Direct Seeding Demo'; Tracey Feist, freelance writer working for Alberta Bison Association, bronze award for a news release on the Alberta Bison Meat Chart; Tracey Feist, freelance writer working for the North American Waterfowl Management Plan, wins the gold award for the publication - 'Linking Soil & Water: Conservation for Future Generations'; Mark Kihn, freelance writer, for his article 'Chipping in on the Farm' which appeared in the *Calgary Herald*; and, Page Newton, freelance writer, for her article 'A Strategic Plan Drives this Young Couple's Success', which appeared in *Cattlemen* magazine. The AFWA exists to serve the common interests of agricultural journalists, including reporters, editors and broadcasters, as well as those in business and government whose primary responsibility is agricultural communications. For further information, contact Janet Kanters, AFWA secretary/treasurer, (403) 926-2157.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51594 8210

Agri-News

November 2, 1998

Going Global

An international panel of trade experts are speaking at the Going Global conference, being held in Red Deer on November 12 and 13, 1998. The conference is organized by the Alberta Agri-Industry Trade Group (AAITG), Alberta Pool and Alberta Agriculture, Food and Rural Development.

"The conference is an opportunity for Albertans to learn about the implications of the 1999 World Trade Organization (WTO) negotiations on the Canadian agri-food sector," says Dale Riddell, AAITG co-chair. "At the conference, Albertans will also have a chance to contribute to the development of recommendations for the negotiating positions the Government of Canada will take to the bargaining table in Geneva in the fall of 1999."

Speakers at the conference, some of the world's most informed trade policy people, include: His Excellency Nestor Osorio, chair of the WTO Agriculture Committee; Honourable Ed Stelmach, Minister of Alberta Agriculture, Food and Rural Development; and Honourable Lyle Vanclief, Minister of Agriculture and Agri-Food Canada; Gus Schumacher, U.S. Undersecretary for farm and foreign agriculture services; Greg Wood, Australian High Commissioner to Canada; and, Jonathan Fried, Canada's chief trade negotiator. The Dean of Business at the University of Alberta, Mike Percy is the conference moderator and business editor Diane Francis is the keynote speaker at the November 12 banquet.

"Alberta exports about 65 to 70 per cent of everything produced in the province," says Ray Bassett, Assistant Deputy Minister of planning and development with Alberta Agriculture and AAITG co-chair. "There are tremendous opportunities to increase the profitability for Alberta farmers. To reach our potential, as a province, we need to facilitate greater market access, including addressing any possible local or international problems that could limit trading opportunities. The WTO is the forum where these opportunities and barriers can be addressed. It's important that Albertans be informed and aware of the issues being discussed at the 1999 negotiations."

To receive additional information about the two-day event, or ask questions about last minute registration, contact Cheryl Grolway at the conference office (403) 422-1817 or e-mail: **grolway@agric.gov.ab.ca**

Contact:	*Ray Bassett*	*Cheryl Grolway*
	(403) 427-1957	*(403) 422-1817*

This Week

Going Global 1

4-H CAN make a difference! 2

Ideal harvest weather continued through September 2

Prairie fruit and the science of Saskatoons 3

Extension time in the sheep industry 3

Agronomy update 4

Alberta farmers insured more crops in 1998 4

Briefs 5

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

4-H CAN make a difference!

November 2 through 8, 1998 is National 4-H Week, and the late W. J. Elliot, principal of the Olds School of Agriculture and founder of the 4-H clubs in Alberta, would have been proud. In the last 81 years, Alberta's 4-H program has gone from cows and cooking... to the internet and entrepreneurs, and today, 4-H members are just as comfortable on the information highway as they are on the farm.

"The recent Measures of Success study looked at the impact of the 4-H program in Canada," says Carol Sullivan, provincial 4-H media and marketing specialist with Alberta Agriculture, Food and Rural Development. "It proved what industry leaders have known for years: 4-H gives youth the edge to compete in today's world. The study showed that 4-H Alumni are better educated, more often employed, much more often employed in the agriculture and food industry and they report substantially higher incomes than the national average for Canadians. They are also more involved in community organizations."

During National 4-H Week, Alberta 4-H'ers will be demonstrating that ***4-H CAN Make a Difference***. At Farmfair International '98, being held in Northlands Park, Edmonton, 4-H members will accept donations to the Food Bank Network Association. In return for their donations, visitors to Farmfair International will receive an Alberta Made food coupon, sample or recipe. The food donations will be distributed to Food Banks across Alberta.

"Together with their volunteer leaders, 4-H'ers pursue the 4-H motto *Learn To Do By Doing* as they participate in club activities and 4-H projects," adds Sullivan. "Alberta Treasury Branches will be showcasing the work of Alberta 4-H'ers with local 4-H Clubs' displays.

Wherever they live, on a farm or acreage, in a town or the city, Alberta's youth belong in 4-H. Alberta's 4-H program has something for everyone including projects in conservation, computers, livestock, veterinary science, photography, crafts, the entrepreneurial project, Business Cent$ and much more. Now that's something to celebrate!

To join 4-H call (403) 422-4H4H or visit the 4-H web site at **http://www.agric.gov.ab.ca/4h**

Contact: Carol Sullivan
(403) 422 4H4H

Ideal harvest weather continued through September

Warm, dry conditions in September helped farmers complete one of the earliest harvests on record.

"The overall provincial average temperature was 2.3 degrees above normal and the provincial average precipitation was less than half the normal for September in Alberta," says Peter Dzikowski, agri-weather specialist with Alberta Agriculture, Food and Rural Development, Edmonton. "These conditions provided good harvest weather for most Alberta farmers."

September temperatures ranged from near normal to 4.9 degrees Celsius above normal. All regions in the province reported above normal temperatures.

"Growing degree day totals from April 1 to September 30 were about three to four weeks ahead of normal," says Dzikowski. "This contributed to early crop maturity and allowed for the early harvest with little concern about fall frost.

"Although frost was reported in parts of the Peace and southern regions on September 19, the first widespread killing frost occurred on September 29 and 30. That's about two weeks later than the average first fall frost date for most agricultural regions of Alberta. In mid-September, temperatures in some regions dropped to between 0 and -7.7 degrees. This first frost was followed by warm, dry weather until the end of the month providing ideal harvest weather."

All regions reported below normal precipitation. Amounts of 2.8 to 99.4 mm, or 10 to 174 per cent of normal were reported. The Peace region and north east region were the driest parts of Alberta in September, leading to continued concern over water supply shortages.

"Pincher Creek reported the greatest precipitation departure, 174 per cent of normal about 99.4 mm," adds Dzikowski. "On the dry side, Milk River reported 2.8 mm of precipitation in September, only 10 per cent of it's long term average."

The provincial average September precipitation of 20.5 mm was well below the 1961 to 1990 average of 44.2 mm. These averages are based on data recorded at 62 Environment Canada climate stations across Alberta.

Contact: Peter Dzikowski
(403) 427-3594

Prairie fruit and the science of Saskatoons

For many years, growing Saskatoon plants for commercial fruit production required some knowledge, a little guesswork and lots of experience based on trial and error.

"In agriculture, as in any business, the trial and error method can be very time consuming and expensive," says Nadine Stielow of the Fruit Growers Society of Alberta, Fort Saskatchewan. "Production questions arise that range from how the plants mature and their flowering and fruiting potential, right down to what is the best way to store the harvested fruit."

For prairie fruit growers, a broader knowledge of production issues may increase the quantity and quality of marketable fruit. These issues will be addressed at the Alberta Horticulture Congress, November 12 to 14, 1998 at the Mayfield Inn, Edmonton.

Dr. Jocelyn Ozga, associate professor at the U of A, has been teaching and conducting research in the department of agricultural, food and nutritional science at the university for the last six years. Her areas of research include studying Saskatoon fruit development. She will address the topics of flower and fruit development and present information from recent studies that compare flowering patterns and fruit development in four cultivars of Saskatoons.

Dr. Rick Knowles, professor in the department of plant science at the U of A, specializes in the field of post-harvest physiology of horticultural products. This topic involves understanding how fruits and vegetables ripen and how they behave after harvest. Such knowledge will help producers store produce in the best way possible. Knowles, along with Suzy Rogiers, has studied the ripening process in Saskatoons and has been working on methods to keep harvested Saskatoon berries fresh for long periods of time. He also has experience with controlled-atmosphere (CA) storage. At the Hort Congress, he will talk about the ripening process in Saskatoons, CA storage systems and a method of cooling produce that is very efficient.

Many topics on prairie fruit orchards, crop production and marketing will be covered at the Congress. Programs and registration packages for the Hort Congress are available by calling the Congress office at (403) 415-2324. Registration for the three-day Congress is $175 plus GST.

For information on commercial fruit sessions, contact Don Fossum (403) 467-6992 or Nadine Stielow (403) 998-0481, both members of the Fruit Growers Society of Alberta.

Contact: *Nadine Stielow*
(403) 998-0481
Shirley Alton
(403) 415-2324
Sharon Faye
(403) 422-2961

Extension time in the sheep industry

November is the time when extension activities in the sheep industry kick into high gear at Olds College and around the province.

"Earlier this year, the Alberta Sheep & Wool Commission (ASWC) identified several barriers to growth in the sheep industry," says Susan Hosford, sheep development advisor with Alberta Agriculture, Food and Rural Development. "One of the critical factors in resolving most of the barriers is education on a variety of issues. To address two education needs, grazing and predator control, it is planned to take some educational sessions on the road."

The first stop for the 'traveling road show' is at the Lethbridge Research Station conference room on November 12 at 7:30 p.m. Further information on this session is available by contacting Kim Stanford at (403) 381-5150.

On November 13, the session is being held at the Lacombe Research Station administration building in conjunction with the Zone 4 meeting of the ASWC. The meeting starts at 2:00 p.m. and the educational session at 7:30 p.m. Further information on this session is available by contacting Hosford at (403)877-2226.

The last session is planned for November 14 at Courtesy Corner in Rycroft. The program starts at 9:00 a.m. with the Zone 7 ASWC, continued with the annual general meeting of the Peace River Lamb Growers and followed by the educational session. Contact for this day's meetings and session is Ernie Hills (403) 532-0290.

"The featured speaker at the sessions is Dr. Ben Bartlett, veterinarian, sheep producer and livestock extension agent from Michigan State University. He will speak on pasture and grazing management," says Hosford. "John Bourne, vertebrate pest control specialist with Alberta Agriculture will cover predator control for sheep producers. Each session also includes a presentation by a local forage specialist."

Olds College is offering a course on Sheep Shearing and Wool Handling on November 28 and 29, 1998. Information on this course is available by contacting Jennifer Hunder (403) 556-4734, Olds

The Beginner Sheep Production School is scheduled for February 6 and 7, 1999. This seminar is of interest to anyone in the sheep industry who is looking to upgrade their knowledge.

Registrations for the Intermediate Sheep Production School on November 7 and 8, 1998 have already been filled. For information on future intermediate course dates, contact Olds College extension services at (403) 556-4734.

Contact: *Susan Hosford*
(403) 877-2226

Agronomy update

Alberta Agriculture, Food and Rural Development is holding the annual Agronomy Update Conference in Lethbridge on January 21 to 22, 1999.

"The conference is intended to provide an update for farmers and specialists on the latest agronomic research being conducted in the province and over 30 speakers will be discussing their latest results," says Dr. Ross McKenzie, soil fertility specialist with Alberta Agriculture, Food and Rural Development, Lethbridge. "A number of the planned sessions include in-depth panel discussion periods."

Conference sessions include:

- Soil fertility and management – new fertilizer products, elemental S fertilizer, measuring soil quality and soil health;
- Manure management update – lessons from long-term research plots, composting manure and new research projects being initiated;
- Silage production – using barley, triticale and corn for silage;
- Insect update – outbreak forecasts, new research, developing crop resistance to insects, environmental impact of insecticides and bio-control of insects;
- Crop production research – including canola and cereal research, growing high protein wheat and optimizing pea production;
- Crop rotation research – why rotations are critical to optimizing yields and the importance of rotations in disease control; and,
- Herbicide and weed update – precision spraying of weeds, controlling dandelions in zero-till and hay, effect of time of weed removal on yields, integrated weed management, update on weed resistance to herbicides and implications for on-farm herbicide management.

Conference registration cost is $65. For more information, or to register, contact the agronomy unit office in Lethbridge, (403) 381-5126.

Contact: Ross McKenzie
(403) 381-5842

Alberta farmers insured more crops in 1998

Attracted by lower premiums and concerned about dry field conditions, Alberta farmers bought crop insurance on 9.5 million acres of production in 1998. That's up 12 per cent – or one million acres – from 1997 levels, the second substantial coverage increase in as many years.

"In direct response to farmer feedback, Agriculture Financial Services Corporation (AFSC) reduced premiums an average of 25 per cent for the 1997 crop year," says Ed Stelmach Minister of Agriculture, Food and Rural Development. "Farmers took advantage of lower premiums by insuring 8.5 million acres of crop in 1997, an increase of 1.2 million acres over 1996."

For 1998, AFSC took its New Look Crop Insurance a step further, giving farmers more flexibility in their coverage options and providing a new premium discount for farmers who insured all their crops.

"Even though 1998's insured acres increased by one million, AFSC wrote only 282 more contracts than in 1997," adds Stelmach. "That means average policyholders insured about 90 per cent of their seeded acreage in 1998, compared to the more customary level of 70 per cent to 80 per cent."

"The growth in acres covered is a result of seasonal factors combined with the excellent value AFSC offers farmers," says Brian Manning, president and managing director of Agriculture Financial Services Corporation. "AFSC sells risk management and peace of mind. With the dry fall and winter of 1997-98, Alberta farmers weren't taking any chances on losing their income to natural perils. We're delighted that AFSC's greater flexibility and lower premiums made crop insurance an easy decision."

In 1998, 75 per cent of farmers who purchased crop insurance also added a hail endorsement rider to their policy to protect against losses due to hail. Farmers can also purchase straight hail insurance without buying crop insurance. In 1998, 4.8 million acres were insured through this program.

AFSC is a provincial Crown corporation with 49 offices across Alberta. It provides farmers and agri-businesses with crop insurance, income protection and financing options.

Contact: Ron Glen (403) 427-2137

Brian Manning (403) 782-8225

Agri-News Briefs

Cheese lovers rejoice!

Studies show that along with good dental care, cheese can help reduce dental cavities. Researchers have pointed to a number of ways in which cheese can help keep teeth healthy. The calcium and phosphorous in cheese are slowly released as you eat. These minerals go into tooth enamel and help strengthen or re-mineralize the enamel in teeth. Some researchers believe the fat in cheese may coat teeth and act as a barrier between food and the bacteria that can cause cavities. Casein, one of the proteins in cheese, may also help protect teeth. Finally, cheese reduces the acidity of saliva, that in turn reduces the risk of tooth decay. Eating a piece of cheese is a wise dental choice and something to smile about. For more information, contact the Alberta Milk Producers (403) 453-5942 in Edmonton or toll free in Alberta 1-800-252-7530.

Reduced tillage conference and trade show

Exploring Cropping Opportunities for Dryland and Irrigation, a reduced tillage conference and trade show, is being held on December 1 and 2, 1998 at the Cypress Centre in Medicine Hat. The conference's two-day program is organized under the direction of farmers from southern Alberta and addresses reduced tillage and weed control for both dryland and irrigation situations. Topics being discussed include: cropping systems, forage production, control of weeds, pulse production, rotations for reduced tillage, residue management and fertility considerations. Advance registration fees are $25 for a one-day pass or $40 for a two-day pass. Registration is required by November 27, 1998. For further information, contact Carol Willms at Alberta Agriculture, Food and Rural Development at (403) 529-3616.

CWA 1998

The Canadian Western Agribition (CWA) is held from November 22 until November 29 in Regina, Saskatchewan. The 1998 Agribition features more livestock events than ever before. Many demonstrations, competitions, shows and sales are planned, including:

- 16 purebred beef breeds, nine of which are Canadian National Shows:
- Texas Longhorns trophy steer show, mature female show and prospect steer show;
- the Canadian National Bison show and sale;
- an Elk sale;
- North America Equine Ranching Information Council's (NAERIC) Super Team competition;
- NAERIC's Select Ranch Horse competition and sale;
- Canadian Cutting Horse Association non-pro & open competition;
- CWA dressed meat competition;
- Draft horse hitch show and junior showmanship;
- Junior swine show;
- Boer goats show and sale;
- premiering this year, a dairy goat show and sale; and,
- a llama show and sale, to name but a few.

For more information on the Canadian Western Agribition 1998, contact Marci Desroches (306) 586-8553, Regina, Saskatchewan.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51594 8095

Agri-News

November 9, 1998

Two east central Albertans chosen for 4-H Hall of Fame

On October 28, Ed Stelmach, Minister of Agriculture, Food and Rural Development, announced the 1998 inductees to the Alberta 4-H Hall of Fame. The announcement was made as part of the preparations leading up to National 4-H Week, November 2 to 8, 1998.

"Together, Dwayne Grover of Stettler and Diane Maull of Metiskow have dedicated close to 75 years to Alberta's 4-H program," says Stelmach. "Their leadership and initiative has made an impact at all levels of 4-H."

As the youngest member inducted into the 4-H Hall of Fame, Dwayne Grover is known locally as *Mr. 4-H*. Former members say that Grover has the ability to cultivate skills in both children and adults that they didn't realize they possessed. Grover grew up in the Byemoor 4-H Beef Club and was the first leader of the Rainbow Riders 4-H Horse Club. Locally, he has held executive positions on the Stettler district council and several committees. He was instrumental in the development of several member programs including Mind Your Own Business, the east central judging, knowledge and marketing clinics, rodeos, light horse shows and STARS Rides for Life.

Grover's knowledge and talents have been enlisted in both the planning and delivery of such provincial events as the Provincial 4-H Leaders' Conference, Showcase '92, Provincial Equine Advisory Committee, 4-H rodeo project and the new horse project material.

In addition to his 4-H activities, Grover was recognized as an Alberta Treasury Branches' Great Albertan and the 1998 Volunteer of the Year for the Alberta Quarter Horse Association. He was also involved with the Sylvan Lake and Stettler Agricultural Societies and the Alberta Summer Games.

Diane Maull began her 4-H career as a member, where she was awarded a trip to the Toronto Royal Winter Fair. She served as a 4-H alumni member and leader of the Czar-Metiskow 4-H Club. She has also held several positions at all levels of 4-H including chairing Showcase '92 and being president of the Alberta 4-H Council and chair of the Cookbook Committee. Maull is currently vice-chair of the 4-H Foundation of Alberta.

During her term as president, Maull guided the 4-H Council through a transition period of budget reduction. She was a member of the 4-H Partners Team when 4-H was a Silver Recipient at the Premier's Award of Excellence ceremonies in 1997.

Cont'd on page 2

This Week

Two east central Albertans chosen for 4-H Hall of Fame 1

Designer genes at the dinner table 2

Fall fertilizing 2

Economic trends in Alberta's hog production 3

Alberta 4-H'ers compete in Montana 3

New land stewardship resource 3

Briefs 4

Agri-*News* **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

Maull is also active in other community initiatives. She has participated in Canadian Girls In Training, Women of Unifarm, the regional hospital advisory board and the Wainwright Progressive Conservative Association. In 1991, Maull and her husband received the Alberta Farm Family Award.

"Dwayne Grover and Diane Maull have both dedicated many years to Alberta's 4-H program. It is appropriate that we pay tribute to them during National 4-H Week," adds Stelmach. They will be officially inducted into the Alberta 4-H Hall of Fame at the 4-H Leaders' Conference Banquet in Red Deer on January 16, 1999.

Contact: Penny Wilkes
(403) 422-4H4H (4444)

Designer genes at the dinner table

A public food biotechnology conference, *Designer Genes at the Dinner Table*, is being held at the University of Calgary on March 5 to 7, 1999. This major citizens' conference on food biotechnology will bring together participants from British Columbia, Alberta, Saskatchewan and Manitoba to consider the social impacts of genetic modification of food products.

"For the first time in Canada, ordinary citizens are being invited to participate as the main players in discussions with experts on the future of food," says Edna Einsiedel, communications professor at the University of Calgary. "The recent release of the Canadian Biotechnology Strategy, which relies extensively on public consultation and involvement, makes this conference very timely."

In addition to the general public, regulators, scientists and representatives of consumer and environmental organizations will attend as experts to answer specific questions from the citizen panellists.

"Although it has been used for 10 years in Europe, this unique process has never been tried in Canada before," says conference manager Deborah Eastlick. "This conference gives regular people an opportunity to participate in a high level discussion and possibly influence public policy through recommendations made during the conference."

The report of the citizen panel from the conference will be distributed to the Canadian public, industry and will be submitted to the seven federal ministries responsible for biotechnology - Industry, Agriculture and Agri-Food, Health, Environment, Fisheries and Oceans, Natural Resources and International Trade.

"An invitation was extended to the public in September," says Eastlick. "Over 320 responses were received from Western Canada, from which 15 panellists will be selected to participate at the March conference along with eight to 12 experts."

For more information on the conference, or to be on the list to receive the citizen panel report, contact Deborah Eastlick at (403) 220-3925 in Calgary or e-mail **gedisgn@ucalgary.ca**

Contact: Deborah Eastlick
(403) 220-3925
e-mail: mtkelly@ucalgary.ca

Fall fertilizing

Deciding on a fall fertilization program is a difficult chore any year. Research data show that fall application can return a better yield response than applying in the spring when conditions are dry, but there is some loss of effectiveness when there is excess moisture.

"Fertilizer prices are often lower in the fall and there may be some tax advantage to buying inputs before year end," says Ron Hockridge, crop specialist with Alberta Agriculture, Food and Rural Development, Wetaskiwin. "Fall fertilizing can also mean time savings during the busy spring period, an important factor to consider. On the other hand, finding spare money to buy inputs that far ahead of the growing season can be a challenge."

This year, the decision was made harder by an early harvest and an open fall. Farmers certainly had more time to get fall work done but timing of application has become the key question.

"In the past, specialists have recommended that soil testing be delayed until soil temperatures where fertilizer is placed are below four degrees Celsius," says Hockridge. "Research shows that soil nutrient levels remain virtually unchanged between fall and spring at that point. However, recent work by Westco shows that soil nutrient losses are normally very low when fertilizer is applied before this time. Taking all the information available and making a decision is where farming becomes an art as much as a science."

Research attempts to measure what is normal and how much variation away from the norm you can expect in any given year. Researchers replicate plots to find how much variation there is in a year and tries to repeat this experiment several years to get answers that apply to the varying climate of a particular area. In order to control costs, extreme conditions that seldom occur are ignored. These answers do not apply to every situation.

"In applying the results from research, farmers need a clear understanding of the experiments that were done and the conditions being faced," adds Hockridge. "In the case of fertilizer, loss is a function of temperature, moisture, the amount of time at that temperature and several other factors. Research gives farmers benchmark data for making decisions. The farmer needs to judge how well the data fits his situation and anticipate changes that will affect the decision.

Cont'd on page 3

"Weather trends in the province indicate that soils that are above four degrees Celsius won't stay that way long enough to make a significant difference on fertilizer losses. Farmers who are going to apply fertilizer this fall, should probably start now."

Contact: *Ron Hockridge*
(403) 361-1240

Economic trends in Alberta's hog production

Market price fluctuations have a significant effect on profitability. A model has been developed to track a number of input costs and revenue for Alberta over a period of time and compare these numbers to other areas in North America.

"The study was based on a 600 sow farrow-to-finish model operation with constant production efficiency," says Fred Schuld, pork programs coordinator with Alberta Agriculture, Food and Rural Development, Edmonton. "Four cost variables were examined: feed, labour, capital depreciation, capital interest, and revenue. Quarterly data was collected from 1989 to 1998."

Many observations were made, including:

- feed costs have declined by 30 per cent since the second quarter of 1996;
- feed costs ranged from 35 to 50 per cent of revenue;
- the other cost items examined were much less variable than feed costs;
- hog prices were higher than long-term averages for most of 1996 and 1997; and,
- margins fluctuated widely primarily due to hog prices and, to a lesser extent, feed costs.

Further details from this study are available and producers are encouraged to contact Richard Heikkila at (403) 422-4088 or Fred Schuld at (403) 427-5320. Also, the full text of this study has been posted to Alberta Agriculture's web site:
http://www.agric.gov.ab.ca/livestock/pork/baconbits/index.html

Hog prices are published on the Internet at these sites:

- http://www.agric.gov.ab.ca/economic/stats/wklvstck.html
- http://www.FBMInet.ca/bulletin/fbmbul03.htm
- http://www.gov.mb.ca/agriculture/news/mmgo.html
- http://www.albertapork.com/markets.htm

Contact: *Fred Schuld* *Richard Heikkila*
(403) 427-4592 *(403) 422-4088*

Alberta 4-H'ers compete in Montana

Alberta 4-H member judges did very well at the Northern International Livestock Exposition (NILE) Livestock Judging Competition held in Billings, Montana in October. Four Alberta 4-H'ers traveled to Montana to compete in the competition which involved over 350 contestants in three divisions.

"The Alberta team consisted of Heidi Hofstra of Millet, Carolyn Miller of Balzac, Stephanie Brander of Airdrie and Kirstine Nicol of Etziko," says Henry Wiegman, provincial 4-H agriculture specialist with Alberta Agriculture, Food and Rural Development. "They competed in the Senior 4-H Division with over 80 other participants."

Team Alberta finished in eighth place overall. They were also sixth overall for their reasons and second in swine judging. In addition to doing very well as a team, members had excellent individual results. Heidi Hofstra, a Rollyview 4-H Dairy Club member was first in swine judging and sixth overall. Carolyn Miller of Airdrie 4-H Beef Club was fourth in swine judging and Kirstine Nicol of the Shortgrass Beef Club was seventh in beef judging. These placings mark the best performance the Alberta Team has had in three years of competing at the NILE.

4-H members who traveled to the NILE earned a place on the team based on their results last August at the Alberta 4-H Provincial Multi Species Judging Competition held in Olds.

Alberta also sends a team of eight judges to the Agribition International Multi Species Judging Competition in Regina in late November and a team of eight judges to the Denver, Colorado Western Regional 4-H Judging Competition in January, 1999.

The NILE judging award trip was made possible through the support and co-sponsorship of Alberta 4-H Programs Trust, Alberta Treasury Branches, and Lammle's Western Wear.

Contact: *Henry Wiegman*
(403) 422 4H4H

New land stewardship resource

A new resource centre and referral service was launched on internet on October 23, 1998. The site, Land Stewardship Resource Centre contains numerous references on the best available resources, websites, conservation programs and contacts. The site address is:
http://www.LandStewardship.org

"Producers looking for practical tips on water quality, biodiversity, grazing management, private woodlots, conservation tillage, homes and gardens, can find information through this new on-line information clearinghouse," says Ken Gurr of the Land Stewardship Centre of Canada (LSCC). "The

Cont'd on page 4

site also features a virtual general store with special sections devoted to Alberta made products, environmentally sustainable products, a network of volunteer land stewards, and an on-line Kitchen Table forum."

The goal of this on-line service is to make information easily accessible and practical for public use. Promoting good land stewardship and making sure information is readily available is essential for maintaining healthy landscapes now and in the future.

"From farmers and ranchers to acreage owners and backyard gardeners, people want to know what's available, what they can do right now on their land and what the benefits of practicing sound land stewardship are," adds Gurr. "The Resource Centre was developed to help answer questions and inspire people to take practical, positive actions to look after their land in an environmentally friendly way."

The Resource Centre, a free public service available on internet, was developed with funding and support from many organizations including: Alberta Agriculture, Food and Rural Development's AESA (Alberta Environmentally Sustainable Agriculture program), Environment Canada-Eco Action 2000, Ducks Unlimited Canada/North American Waterfowl Management Plan, Alberta Environmental Protection, Alberta Cattle Commission, Alberta Sport, Recreation, Parks & Wildlife Foundation, Alberta Pacific Forest Industries, Earthkeeping, Alberta Environment Network and FEESA (Friends of Environmental Education Society of Alberta).

"In addition to the website, Albertans can phone in with stewardship questions," says Gurr. "The number to call is (403) 458-5700. Plans are to have a 1-800 service up and running in 1999."

Contact: *Ken Gurr*
(403) 458-5700
e-mail: Lscgurr@compusmart.ab.ca

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51594 7915

Agri-News Briefs

Leaders Challenge Conference

Agri-Industry: Boundless Growth? is the theme of the upcoming Leaders Challenge conference being held at the Capri Hotel and Convention Centre in Red Deer on January 22 to 23, 1999. The conference is a follow-up to the January 1997 Leaders Challenge conference, *Seizing the $20 Billion Opportunity*, organized by the Agriculture and Food Council. The 1999 conference focuses on where the industry is headed and where boundaries to growth are likely to be in the future. It provides an opportunity to meet other industry representatives, customers, government representatives and potential partners. Current issues and trends, the latest successes in Alberta's Agri-Industry and challenges of the shifting and emerging industry boundaries will be explored. Delegates will hear from industry experts on key topics, participate in media sessions on important issues facing the industry, and visit value chain displays. Areas for discussion include: emerging industries, bio-tech and functional foods, value chains, implications of the Post Crow era, investment and finance, niche marketing, food safety, and the latest on global trade negotiations. For further information, contact Don Diduck at the Alberta Congress Board at (403) 421-9330, e-mail: congress@sas.ab.ca

Agri-News

November 16, 1998

Get soaked!

Soaking yard and garden plants, trees and shrubs in the fall is an important step in preparing plants for the winter. Fall watering can recharge the moisture supply in the root zone and in the plants, if they are still absorbing water.

"In the fall, after the first frost, but before the soil is frozen, fill the soil profile around trees and shrubs with water," says Shelley Barkley, information officer at the Crop Diversification Centre, Alberta Agriculture, Food and Rural Development, Brooks. "When done too late in the fall, the plants may not able to absorb this water into their root systems, but soaking may still help protect the roots from drying out when there is little or no snow cover. That final soaking also ensures that water is available early in the spring. On the other hand, if the plants can still take the water in and move it up and into the branches, buds and needles, they will go into winter in the best possible shape. Irrigate the shallow-rooted species twice to be sure there is ample water in the root zone."

When fall watering, knowing how long to let the water run has no set rule and is not easily answered. A lot of factors such as soil texture, water pressure and water flow, need to be considered.

"It is important to recharge the root zone with water, but be sure the plants are not sitting in a puddle," says Barkley. "A word of caution if dealing with newly planted trees in a heavy clay soil with poor drainage, watch how much water you apply and when. If the water applied is not absorbed into the soil, it can freeze and heave the root ball partially out of the ground."

It is easy to focus on trees and shrubs when watering, but don't overlook watering the other perennial plants in the yard and garden as well. Strawberries, raspberries and flowering perennials will all come through winter in better shape if they are watered in late fall.

"Fall watering will not overcome the stress caused by inadequate watering during the growing season," adds Barkley. "Proper watering practices during the spring and summer, plus fall watering, will help plants to come through the winter in the best possible health.

Contact: Shelley Barkley
(403) 362-1305

This Week

Get soaked! 1

Annual horse breeders and owners conference 2

Care and handling of farm animals 2

Scentless chamomile biocontrol 2

Special weed problems 3

Sliding down the cattle cycle 4

Briefs 4

Annual horse breeders and owners conference

Each year in Alberta, the horse industry section of Alberta Agriculture, Food and Rural Development organizes the ***Alberta Horse Breeders and Owners Conference***. The event is the premier horse conference in North America and one that Alberta's horse enthusiasts look forward to. The 1999 conference is being held on January 8, 9 and 10, 1999 at the Capri Centre in Red Deer.

"The 1999 conference features 14 internationally recognized speakers," says Les Burwash, manager of equine programs with Alberta Agriculture. "The organizing committee has put together an excellent program of speakers and presentations. Topics such as new equine nutrition and research, pre-purchase exams, trailer safety, and the value of a versatile horse are included in the agenda."

The conference is arranged so that attendees can follow four streams of interest – Arabian, Quarter Horse, Thoroughbred and all breeds. While many follow the program designed for a particular breed preference, conference participants can attend any of the sessions and will receive the printed materials from all sessions.

The program starts with a wine and cheese reception on Friday, January 8 at 7:00 p.m. Saturday's sessions begin at 8:40 a.m. Brian Keating of the Calgary Zoo presents **Secret Springs: Classic Wild Africa** as the Saturday evening special feature and on Sunday, the conference wraps up with another full day of sessions.

Conference registration is $75 per person. For more information about the 1999 conference, contact Burwash in Airdrie at (403) 948-8532. Government numbers are toll-free by dialing 310-0000 to connect to a RITE line.

Contact: *Les Burwash*
(403) 948-8538

Care and handling of farm animals

When it comes to the care and handling of farm animals, specific Codes of Practice have been established for the various species. These codes of practice give clear guidelines regarding acceptable practices for rearing, transportation and marketing of Alberta livestock.

"A series of fact sheets, each four pages in length, provides an overview of the national Codes of Practice," says Dr. Ray Fenton, head of the animal welfare for Alberta Agriculture, Food and Rural Development. "They are perfect for classroom use, agricultural awareness programs, agricultural fairs and exhibitions, and media. They can also be used to increase awareness among other segments of the agri-food sector."

Fact Sheets are now available for: beef cattle, dairy cattle, pigs, poultry, sheep, veal calves, horses and farmed deer. The new fact sheets outline all groups involved in the development of the detailed Codes of Practice.

Alberta Agriculture has assumed responsibility for the printing and distribution of the fact sheets within the province. Copies are available at no charge from the Alberta Farm Animal Care Association (AFAC), veterinary associations, livestock and farm organizations, Alberta Agriculture district offices and by calling Julie Popowicz, animal welfare branch, Alberta Agriculture, at (403) 422-4844 or fax (403) 427-1057. Government numbers are toll-free by dialing 310-0000 to connect to a RITE line. When supplies run out, reproductions may be made from copies received. The fact sheets are also available on the Canadian Agri-Food Research Council (CARC) website: **www.carc-crac.ca**

"Recommended Codes of Practice for the Care and Handling of Farm Animals are nationally developed guidelines for the proper care and handling of the different species of farm animals," adds Fenton. "The Codes are voluntary and are intended to be used as an educational tool in the promotion of sound husbandry and welfare practices. The Codes contain recommendations to assist farmers and others in the agriculture and food sector to compare and improve their own livestock management practices. Presently, there are eight Codes, and two more are under development."

Contact: *Dr. Ray Fenton* *Julie Popowicz*
(403) 427-4615 *(403) 422-4844*

Scentless chamomile biocontrol

A seed weevil released six years ago as a biocontrol agent for the noxious weed scentless chamomile has successfully established in Western Canada.

"Researchers at the Alberta Research Council (ARC) and Lethbridge Research Centre (LRC) have jointly monitored the establishment of the seed weevil since its release," says Dr. Alec McClay, weed biocontrol specialist with ARC. "Recent surveys show good establishment in approximately 70 per cent of release sites."

Scentless chamomile is a severe problem in cropland and waste areas of the black, grey and dark brown soil zones of Western Canada. With seed production of up to 1.8 million per square metre and no major enemies in Canada, the European weed has spread rapidly.

"Scentless chamomile is an aggressive competitor with crops," says weed biocontrol specialist Dr. Rosemarie DeClerck-Floate with LRC. "It can significantly reduce the yield of spring and winter wheat and various perennial crops."

Cont'd on page 3

Few chemicals are registered for use on scentless chamomile and few are effective once the plants pass the seedling stage. About 10 years ago, scientists began considering biological agents to control the weed. The European seed-feeding weevil, ***Apion hookeri*** was the first biocontrol agent screened for safe release in Canada and is the one researchers have been working with for several years. The tiny, black weevil is about two millimetres in length. It develops from egg to adult in the seed heads of scentless chamomile and, once well established, is capable of reducing seed production by feeding on developing seeds.

"In the late 1980s, as part of the research protocol, scientists at the Agriculture Canada and Agri-Food Canada Research Centre in Regina conducted quarantined studies to ensure the weevil would not attack plants of economic importance or any closely- related plant species native to North America. During that time, the European weevil was found to have already made it to North America on its own. A population was discovered on scentless chamomile in Nova Scotia, where field studies on related plants confirmed that it was attacking only scentless chamomile.

The European weevil was given regulatory approval for release in 1992, with the Nova Scotia population also approved for release in Western Canada. The insect has since been released at numerous sites in Alberta, Saskatchewan, Manitoba and British Columbia.

"We've determined that 71 per cent of releases monitored for the past five years have been successfully established," McClay says. According to his results from experimental field plots in Alberta, the seed weevil has shown year-to-year increases of up to 17-fold from an initial release of 38 adults made five years ago. In mass-rearing cages, the increase reached 64-fold. At field sites in Saskatchewan where the weevil was released in 1995, about 10 to 17 per cent of the seed heads checked had been attacked by the insect.

Researchers have also found the number of weevils per seed head is increasing at some sites. At a 1995 release site near Canwood, Saskatchewan, 17 adults were found on one seed head, a record so far for a field release. "Given that it takes about 15 weevils per head to completely destroy the approximately 170 seeds produced by a flower, we hope to see a reduced scentless chamomile seed bank in the future as seed weevil numbers continue to increase," DeClerck-Floate says.

Scientists have discovered that the biocontrol agent can move quickly within and between scentless chamomile patches. In a study near Edmonton, researchers found that the weevil had migrated up to 800 metres from the original release point, three years after the release was made. At Vegreville, weevils were found up to four kilometres away after five years. Once the weevil has been established in a region where scentless chamomile is a problem, McClay and DeClerck-Floate expect that it will be able to find and colonize new patches of the weed without much help from weed control technicians

Contact: *Dr. Rosemarie DeClerck-Floate*
(403) 317-2270
Dr. Alec McClay *Ron McMullin*
(403) 632-8207 *(403) 327-4561*

Special weed problems

Special weeds is a term used to describe weeds that are less common than others and hard to control. Obtaining good information on the subject is often difficult, too.

"Good information on controlling special weeds is essential," says Gordon Frank, crop specialist with Alberta Agriculture, Food and Rural Development, Brooks. "Where to get that information can sometimes pose a problem. In Alberta, the publication ***Crop Protection with Chemicals***, more commonly referred to as the "blue book", is updated each year."

Other sources of information can often help farmers target their weed control programs to specifically deal with their unique weed problems. Manitoba Agriculture has a listing of some special weeds and some of the herbicide options that can be used to control them. Taking information from other jurisdictions and modifying it to be effective in Alberta can give farmers extra options for weed control. It is advisable to contact one of the provincial crop specialists or weed and pest control specialists to be sure chemical applications work under Alberta's unique climate and growing conditions.

Some special weeds that cause problems for Alberta farmers, include:

- **Curled Dock** – Roundup or Touchdown is effective when weeds are in the early bud stage. MCPA or 2,4-D amine give top growth control.
- **Goat's Beard** – 2,4-D amine applied in early fall or early spring.
- **Field Horsetail** – MCPA amine or salt formulation should be used to control this weed after the weeds have fully emerged. This gives top growth control. Amitrol in non-cropland when the weed is actively growing will give better control but is costly and non-selective.
- **Milkweed** – Amitrol T can be used in non-cropland Roundup or Touchdown type products are effective in non-crop situations. Milkweed should be in the bud to bloom stage and since not all plants reach this stage at the same time, repeat treatments may be required. When dealing with Milkweed, don't apply herbicides to plants covered with dust.

Cont'd on page 4

- **Round-leaved Mallow** – 2,4-D can be used when weeds are in the two- to four-leaf stage.

"Special weeds are special for a reason," adds Frank. "There are no quick fixes for problems with these weeds. The products mentioned are part of one of the tools farmers can use in conjunction with good cultural practices to control these weeds."

"Knowing ahead of time which weeds will appear next spring gives farmers advance preparation time," says Shaffeek Ali, provincial weed and pest control specialist with Alberta Agriculture. "Take some time over the winter months to contact one of Alberta's crop specialists, weed and pest specialists or a local herbicide dealer to get a clear picture of the types of herbicides and application amounts that may be needed next spring to combat weed problems."

Always remember, when using herbicides, follow label direction for exact rates and registered crops.

Contact: Gordon Frank
(403) 362-1212

Shaffeek Ali
(403) 422-4909

Sliding down the cattle cycle

The cattle markets are bullish these days, in a marketing sense anyway. Word from the media is in favor of rising prices and the growth side of the cattle cycle. There are some reasons to think this may not be entirely true.

"The Canadian market has been enjoying reasonable, if not stellar, cattle prices," says Doug Walkey, market specialist with Alberta Agriculture, Food and Rural Development, Lacombe. "The pricing mechanism is unchanged, with slaughter cattle setting the trend, and feeder cattle being priced based on the slaughter price less feed costs. This year, the feed costs have looked lower than in the past few years, and feeders have been bid accordingly."

There are a number of reasons why the cattle market may still be falling. The first is the exchange rate. Reasonable slaughter cattle prices have been the result of a weak Canadian dollar in relation to US currency. The comparable US price was near $64/cwt as of the beginning of November, hardly a profitable level for our US neighbors. Worse yet, it is unprofitable enough to encourage them to cut back on their herds again this year.

The second issue is the high slaughter weights of cattle. Economic pressures on finishers encouraged them to add extra weight to the carcass, in spite of a sizable discount. For most of this year, the price of fed heifers has been higher than steers, a clear discount on larger-than-acceptable carcass weights. While this appears to be easing, there has still been more beef per head sold into the market.

"A third consideration is the large crop of cattle being slaughtered," adds Walkey. "Calves going to market now were born in 1997, before anyone did much downsizing of their herds. We have a large calf crop being marketed and that means plentiful meat."

Yet another consideration are competitive meats: supplies of pork and chicken are up, increasing the total meat supplies on the market.

"Put it all together, continued culling, large carcass weights, large slaughter numbers and large supplies of competitive meats, and it is small wonder that cattle prices are still trending on the downward side of the cycle," says Walkey.

"Are cattle on the upside of the next cycle? Perhaps. The market is nowhere near the lows set in April 1996 at $54/cwt US. History will likely record that as the low for this cycle. On the other hand, the trend hasn't been broken out of yet. With luck, this will happen over the winter as the US lowers it's breeding cow herd."

For more information, check with a local beef or market specialist with Alberta Agriculture.

Contact: Doug Walkey
(403) 782-3301
e-mail: doug.walkey@agric.gov.ab.ca

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51594 7857

Agri-News Briefs

The future of food and agribusiness

The 4th annual Agri-Food Outlook conference is being held in four centres in Canada in 1998: December 3 in Winnipeg, Manitoba; December 4 in Calgary, Alberta; December 7 in Saskatoon, Saskatchewan; and December 9 in Kitchener, Ontario. The conference is coordinated by the Outlook Partners: George Morris Centre, the Bank of Montreal, Alberta Agriculture, Food and Rural Development, Manitoba Agriculture, Saskatchewan Agriculture and Food, Ontario Agricultural Leadership Alumni and the Ontario Ministry of Agriculture, Food and Rural Affairs. This year's theme is ***The future of food and agribusiness: creating your own...*** The day-long sessions include presentations on the future of food; macroeconomic outlook; grains and oilseeds outlook; commodity outlooks; and, the future of agribusiness. Concurrent sessions on hogs, poultry, dairy, beef and potatoes are also featured. Corporate sponsors for the conference include: Agrium, Cargill Limited, CASCO, Dow AgroSciences and the Canadian Farm Business Management Council. Registration for the conference is $160.50/single and $294.25/double (fees include GST). For more information on the conference or registration, call the Outlook Infoline at 1-800-206-0391.

Agri-News

November 23, 1998

Final agricultural lease review report released

The Agricultural Lease Review Report was jointly released by the Honourable Ed Stelmach, Minister of Agriculture, Food and Rural Development and the Honourable Ty Lund, Minister of Alberta Environmental Protection, on November 12, 1998.

The Agricultural Lease Review Committee, chaired by Tom Thurber, the MLA for Drayton Valley-Calmar, produced a final document after going through an extensive public review process. Thurber has been asked to assist the ministers with the implementation of the legislative and policy changes required from this Government Report.

"This report recommends a change in the status quo," says Thurber. "It outlines the philosophy for a new arrangement between the landowner – the Province – and our leaseholders. There have been some changes to provisions of the Interim Report. Stakeholders will be involved in developing the implementation of a number of the provisions of the Report. The changes will be implemented during 1999."

The Agricultural Lease Review Committee was formed in May 1997, to consult with Albertans and provide recommendations on issues affecting the management of public land in the settled (White) area of the province. Twenty-three public meetings were held across the province in October and November 1997. An Interim Report was released in May 1998 and the public was invited to submit comments on that Interim Report until September 30, 1998.

Individuals or groups that indicated during the public review process that they would like to receive a copy of the final Report will receive theirs in the mail.

Others who are interested in receiving a report may order one by telephone or download the report from Alberta Agriculture's website. Telephone (403) 427-3595 (toll-free in Alberta by first dialing 310-0000), or on the Internet at: **http://www.agric.gov.ab.ca/ruraldev/publands/aglease/index.html**

Contact:	*Tom Thurber, MLA*	*Roger Marvin*
	(403) 415-0981	*(403) 427-3595*

This Week

Final agriculture lease review report released 1

Dandelion control project 2

Warm conditions continued into October 3

Agri-Ville is open for business 3

Berry Production: alternative farm revenue generation 4

Manure Management workshops 4

What can yearling radiographs tell us? 5

People, Pasture$ & Profit$ 6

Briefs 7

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

Agricultural Lease Review Report - Summary of Provisions

Sale of Public Land – Continued use and conservation of public land under provincial ownership is confirmed. These public lands are an asset of the province. This intention will be tempered with orderly sales of vacant public land in the Northern Alberta Development Council Area, primarily in the Peace River Block, which are not required for provincial programs and conservation. The only other exceptions are the possible sale of cultivated land where conservation concerns do not exist and the possible sale of fragmented and/or fractional pieces of public land.

Recreational Access to Public Land – The leaseholder, as "gate-keeper", will be given the right to control access for recreational purposes. The province would:

- act as arbiter if there are disputes concerning unreasonable denial of access, and
- provide permission/waiver of liability slips for the leaseholder to issue. These slips would not be mandatory but should transfer much of the leaseholder's "duty of care" responsibilities to the recreational user.

Industrial Access and Surface Compensation – The area to be used for **new** petroleum and natural gas development, aggregate extraction or other industrial use will be removed from the agricultural lease. The leaseholder would be compensated directly by the industrial user for damages and would have his operational concerns addressed. The province would collect surface rental for the industrial development. This rental would be based on regional comparisons of private land compensation agreements. A portion of the new funds flowing to the province would be used for conservation and resource management.

Agricultural leaseholders with **existing** industrial developments will have their current arrangements "grandfathered" for 10 years to allow the agricultural leaseholders to adjust to the new system.

Municipal Taxes - The grazing fee will include all municipal taxes and rental rates.

Rental Rates – The rental rates will be addressed after this new arrangement between the landowner (Province) and the tenant has been established.

Lease Terms – The term of an agricultural lease will be 10 years and increased to 20 years as a reward for good stewardship as determined by the leaseholder's adherence to a "Good Stewardship Code of Practice."

Assignment – The current method of administering assignment fees will be maintained. The province, as the landowner, will not attempt to capture the majority of the value of the lease on assignment to another party, as suggested in the Interim Report. Assignments within the "family" would continue to be subject to a nominal flat fee.

The name – The current name, public land, will continue.

Where to now – Thurber has been asked to assist the Ministers of Alberta Agriculture, Food and Rural Development and Alberta Environmental Protection with the implementation of the legislative and policy changes required from the report.

Dandelion control project

Dandelions rank amongst the toughest weeds to control in a direct seeding system. They adapt well to the high surface mulch and good soil moisture conditions of a low disturbance planting system. Experience has taught that sweep tillage, low glyphosate rates and many of the common in-crop herbicides will only suppress mature dandelions.

Last fall, Scott Meers and Rob Dunn initiated a Southern Alberta Research Association (SARA) trial to look at interactions between fall, spring pre-plant and in-crop control measures. Trial sites were Nobleford and Langdon with both direct seeded to cereals using a Conservapak seeder.

"The best in-crop control was Ally plus 2,4-D ester, followed closely by Ally plus Curtail M," says Rob Dunn, crop specialist with Alberta Agriculture, Food and Rural Development, Lethbridge. "This supports earlier research by Alberta Agriculture's Agronomy Unit where Ally plus 2,4-D ester provided the best control. Caution must be used in drier regions with Ally because of cropping restrictions."

An interaction was noted, where there was more regrowth in Ally treated plots when dandelions were suppressed from either tillage or pre-plant herbicide. Strong suppression likely interfered with in-crop herbicide uptake.

"Express Pack and Prestige suppressed mature dandelions while Target provided minimal suppression," continues Dunn. "Long term control in these plots relied on good pre-plant treatments. All of the in-crop product combinations were applied at labeled rates.

"The best pre-plant treatment combination at Langdon was fall Roundup at 1.0 L/acre plus a spring burn-off with .5 L/acre. Control dropped off sharply for fall treatments without the spring burn-off. Fall herbicide treatments were effective at Langdon but not at Nobleford because of drought."

For spring pre-plant treatments, Amitrol-T at 1.8 L/acre was slightly better than Roundup at 1.0 L/acre at both locations. However, both fall and spring pre-plant treatments were only providing season long control of mature dandelions. Many plants had begun to recover by mid-summer and were actively growing after harvest.

It should be noted that Amitrol-T is not currently registered for pre-plant application at low rates and may result in crop injury. Most of the fall treatments also received a burn-off treatment of .5 L/acre of Roundup before planting.

Cont'd on page 3

"Plots that received a single cultivation were amongst the poorest for long term control," adds Scott Meers, cereals and oilseeds crop specialist, with Alberta Agriculture. "Perennial dandelions cut off by tillage tended to bounce back later in the spring from deeper roots. They emerged after the in-crop spray which reduced overall control. We also noticed this effect on dandelions along the seed rows in no-till treatments. For example, plants uprooted during planting were the only remaining plants in some of the Ally treated plots after harvest."

The study continues with sites established this fall near Blackie, Claresholm and Lethbridge. Thanks to past year support from cooperators Doug Wright at Nobleford and Richard Wagner at Langdon, along with financial and product support from the Alberta Environmentally Sustainable Agriculture Program, Monsanto, Dupont and Dow Agrosciences.

Contact: Rob Dunn (403) 381-5351
Scott Meers (403) 934-3355

Warm conditions continued into October

Alberta temperatures have been above normal four months in a row, and eight out of ten months for 1998. October temperatures were above normal in most areas of Alberta. Only the weather recording stations at Rocky Mountain House, Milk River, Coronation and Grande Prairie reported below normal temperatures.

October temperatures ranged from 1.3 degrees below normal to 2.3 degrees C above normal. The overall provincial average temperature was 0.7 degrees above normal and the provincial average precipitation was slightly above normal for October in Alberta. These averages are based on preliminary, unverified data recorded at 62 Environment Canada climate stations across Alberta.

"The first day of October was sunny and warm with day time temperatures reaching about 20 degree C," says Peter Dzikowski, agri-weather specialist with Alberta Agriculture, Food and Rural Development. "The next few days, cooler temperatures and rain showers were reported, however, warm weather continued until October 7. During the second week of October cool, wet weather returned. About five to 20 millimeters of precipitation were reported, providing some soil moisture recharge prior to the ground freezing. Conditions were warm and dry the last two weeks of October. The month ended with cooler, more seasonable weather."

The provincial average October precipitation of 24.4 mm was 4.2 mm above the 1961 to 1990 average of 20.2 mm.

"The southern region reported below normal precipitation in October," adds Dzikowski. "The north east region and Peace Region reported near normal precipitation while the central region and north west region reported above normal precipitation. Amounts of 1.6 to 83.8 mm, or 12 to 498 per cent of normal were reported."

Lacombe reported 83.8 mm, the greatest precipitation departure at 498 per cent of normal. On the dry side, Milk River reported 1.6 mm of precipitation in October, only 12 per cent of it's long term average.

"A widespread snowfall covered most of Alberta in the second week of October," says Al Howard, soil moisture specialist with Alberta Agriculture. "It helped recharge soil moisture reserves across the province. Most of the benefit was to areas in west central Alberta where precipitation was heaviest. The very dry soils in the Peace region also improved slightly as a result of the snow.

"The snow was not enough to add to subsoil reserves in southern Alberta, where soils remain very dry throughout most of the region. Soil moisture levels remain moderate to dry through most of the eastern half of the province, with moderate to high moisture levels in the west central region."

For more information, contact Peter Dzikowski in Edmonton at (403) 427-3594 or Al Howard in Lethbridge at (403) 381-5861.

Contact: Peter Dzikowski (403) 427-3594
Al Howard (403) 381-5861

Agri-Ville is open for business

Agri-Ville, an interactive, agricultural website, offers the farming community a variety of ways to learn.

"Agri-Ville is a great way to meet producers from throughout the prairie provinces and learn what works for them," says Nan Bartlett, program representative with the Canada/Alberta Farm Business Management Program (FBMP).

There are a number of ways to participate in the Agri-Ville community. Meeting rooms provide a place to post comments or answer someone else's questions about a number of specific topics.

"Membership is free and the rewards are unlimited," says Bartlett. "Each individual adds to the discussion at his own convenience. When a question is posted, anyone wishing to add comments or offer suggestions can post their responses immediately or whenever their schedule permits."

Meeting rooms are based on subject matter. The current list includes: cereals and oilseeds; beef production; commodity marketing; developing new markets; intensive livestock; technology; and, farm management.

"The website also allows producers to 'chat' in real time," adds Bartlett. "Community Chat Nights and Guest Speaker Nights offer the opportunity to discuss current issues with

Cont'd on page 4

subject matter experts and other producers. Community Chat Nights are unstructured and take place every Tuesday and Wednesday evening at 8:30 p.m. Guest Speaker Nights feature a resource person who presents information on a pre-scheduled topic, followed by an informal discussion. Upcoming Guest Speaker Nights will discuss: deer farming opportunities; year-end tax planning; and, marketing barley. Dates and times are listed on the site, along with easy to follow directions for participating in a 'chat'."

Less interactive, but equally informative are a library that features links to other sites, lists of resources, news articles posted by numerous subject matter experts and weather and market outlooks.

Agri-Ville can be located on the Internet at **www.agri-ville.com**

For more information, contact Bartlett (403) 835-4288 or e-mail: **bartlett@peacenet.com**

Contact: Nan Bartlett
(403) 835-4288

Berry Production: Alternative Farm Revenue Generation

Interested in turning that spare 20 acre patch of ground into cash in the bank? Is the thought of physically working the soil and plants appealing? Does meeting new people spark interest? Ever thought of producing berries?

"More and more farmers and acreage holders are turning that extra piece of ground into a profitable alternative agricultural crop," says Lloyd Hausher, fruit crops specialist with Alberta Agriculture, Food and Rural Development. "Pick-your-own berry operations, once a minor entity in the Alberta horticultural industry, now number in the hundreds across the province."

Consumer demand for pick-your-own and Alberta-grown prairie fruit has fueled the expansion . Consumers are becoming more health conscious, demanding fresh, quality fruit at a fair price. Knowing where your fruit comes from, how it is grown and the farmer who grows it, is becoming increasingly important.

"With the development of new varieties of strawberries and raspberries, consumers can now obtain fresh-picked fruit of these crops from early July until freeze-up, mid-September to October," says Hausher. "The personal service provided at the farm gate is also something the customer is looking for which may be lacking at the large grocery outlet."

As demand for fresh, quality product continues to increase so does the opportunity for Alberta's established berry producers or prospective new berry producers.

"Strawberries, raspberries and saskatoons are the three most sought after direct-market berry crops," adds Hausher. "Some growers are branching out to other crops such as chokecherries, pincherries, black and red currant and sour cherries as demand at their specific location warrants."

Most of Alberta's direct-market berry industry is u-pick or pick-your-own based. This reduces the harvest labor input of the operation, which can be used for field supervision and sales. Although at present it is minor, there is an increasing quantity of fruit being sold pre-picked at the farm gate and farmers' market.

Regardless of how is it marketed to this point (other than a few specific locations) growers continue to have more demand than product. Most producers end up with a mailing/phone list at the end of the year of people still wanting berries.

"Proximity to a large urban center (customers) is most important if looking at starting a direct-market berry farm," explains Hausher. "Water for irrigation, shelter, soil type and topography are also considerations.

"Very little capital input is needed as machinery required is minimal. Most producers have obtained a good to very good rate of return from these farm operations based on their managerial ability and weather cooperation."

Persons interested in this rapidly expanding industry may want to attend the upcoming berry school being held at the Red Deer Lodge in Red Deer on January 27 and 28, 1999. The 13th Annual Commercial Berry Production School will cover general requirements of establishing a berry farm as well as the specifics of producing strawberries, raspberries and saskatoons for direct market sales.

Contact: Lloyd Hausher
(403) 362-1309

Manure Management workshops

Getting a handle on manure management and making the most of nutrients in manure may be just a workshop away. The Farm Business Management Program (FBMP) is teaming up with Alberta Agriculture, Food and Rural Development's conservation and development branch, the Alberta Cattle Commission and LandWise Inc. to offer one- and two-day workshops on nutrient resource management, especially manure management.

"The workshop is titled Understanding Farm/Ranch Resources for Manure Management," says Tamara Lewis, conservation economics agrologist with Alberta Agriculture. "With the new code of practice for Responsible Livestock Development and Manure Management coming out as well as the discussion paper on Regulatory Options for Livestock Operations, there is a need for producers to take a proactive approach to this area of management."

Cont'd on page 5

"There is a lot happening in the area of manure management in the province this year," says Craig Smith, FBMP representative. "We feel these workshops offer producers a results-based opportunity to make things happen on their individual operation."

The two-day workshop offers a practical, hands-on experience for the participants. They will work with aerial photographs of their own property, to develop a resource management plan implementing best management practices that reflect current proposals from the code of practice and regulatory options.

"Strong action is important to maintain a positive image with neighbors and community," adds Smith.

Locations for the workshops are:

Warburg	Nov. 30 - Dec. 1
Wetaskiwin	Dec. 2 - 3
Hanna	Dec. 7 - 8
High River	Dec. 8 - 9
Airdrie	Dec. 14 - 15
Drayton Valley	Dec. 16 - 17
Brooks/Duchess	Jan. 6 - 7
Barrhead	Jan. 11 - 12
Stony Plain	Jan. 13 - 14
Lethbridge	Jan. 18 -19
Innisfail	Jan. 20 - 21
Lacombe	Jan. 26 - 27
Camrose	Feb. 1 - 2
Vermilion/Elk Point	Feb. 8 - 9
Ft. Macleod	Feb. 10 - 11
Castor	Feb. 16 - 17
Stettler	Feb. 18 - 19
Three Hills	Feb. 22 - 23
Oyen	Feb. 24
Hines Creek	Mar. 1 - 2
Grande Prairie	Mar. 3 - 4

It is important for ranchers and farmers to register a least three weeks ahead of time in order to get the aerial photographs of their operation in place. The cost of the two-day workshop is $125, which includes the aerial photographs and lunch both days.

For more information on the workshops, contact Tamara Lewis (403) 427-3819, the Alberta Cattle Commission (403) 275-4400, or Craig Smith (403) 626-3448.

Contact: Tamara Lewis (403) 427-3819 Craig Smith (403) 626-3448

What can yearling radiographs tell us?

The field of equine research, diagnosis and arthroscopic surgery has advanced dramatically. The newest research involving radiographs of young horses and how skeletal development affects longevity and performance as adults, particularly as it applies to racehorses, is one of the featured presentations at the 1999 Horse Breeders and Owners Conference.

"Alberta has a growing population of sport horses that are involved in a variety of disciplines; dressage, endurance racing, hunter jumper, roping, barrel racing and thoroughbred racing, to name but a few," says Les Burwash, head of equine program with Alberta Agriculture, Food and Rural Development. "At this year's conference, we are pleased to feature Dr. Wayne McIlwraith, Professor of Surgery and Director of Equine Sciences at Colorado State University. He has pursued basic research in equine joint disease and joint pathobiology during his years as equine surgeon at CSU which began in 1979."

McIlwraith has written four textbooks in equine surgery and equine arthroscopic surgery and some 175 refereed publications and textbook chapters. He was made a Fellow of the Royal College of Veterinary Surgeons in 1992 for meritorious contributions to learning in equine joint disease and joint surgery. He has also received numerous awards and honors for his continued work in his chosen field.

"We are very fortunate to have Dr. McIlwraith as one of our 14 internationally recognized speakers at the 1999 conference," adds Burwash. "Each year we try to put together a panel of speakers that cover many aspects of the horse industry, from general interest to very specific topics such as equine joint disease. This year is no exception, we have an excellent panel of speakers and look forward to the 1999 conference with great enthusiasm."

The ***Alberta Horse Breeders and Owners Conference*** is the premier horse conference in North America and one that Alberta's horse enthusiasts always look forward to. The 1999 conference is being held on January 8, 9 and 10, 1999 at the Capri Centre in Red Deer.

The conference is arranged so that attendees can follow four streams of interest – Arabian, Quarter Horse, Thoroughbred and all breeds. While many follow the program designed for a particular breed preference, conference participants can attend any of the sessions and will receive the printed materials from all sessions.

Conference registration is $75 per person. For more information about the 1999 conference, contact Burwash in Airdrie at (403)948-8538. Government numbers are toll-free by dialing 310-0000 to connect to a RITE line.

Contact: Les Burwash (403) 948-8538

People, Pasture$ & Profit$

Alberta Forage Council, in conjunction with Alberta Agriculture Food and Rural Development, is sponsoring the second Western Canadian Grazing Conference, to be held at the Mayfield Inn in Edmonton, December 2 & 3, 1998.

This two-day conference is designed for both new and experienced producers who want to improve their pasture production knowledge and techniques. The aim of the conference is to help farmers get more pounds and profit from their pastures!

"The conference theme, ***People, Pastures and Profits*** was chosen to reflect the potential of tame pasture grazing, as well as a reminder that improved pasture management skills will net producers more greenbacks from their green pastures," says Greg Griffin, conference chairman. "Topics for this conference were chosen based on feedback from the very-successful 1996 Western Canadian Grazing Conference."

Conference speakers include experienced grass farmers, researchers and forage specialists from the western provinces, as well as the United States. Burt Smith will use observations from his recent tour of Canada and the U.S. in a look at the importance of pasture and its place in the successes of farmers world-wide. Smith hails from Hawaii, and is well-known in the international grazing community. Gregg Simonds will share some tips to restoring the resources and profitability in the beef industry, while working in harmony with nature. Simonds' background as manager of the Deseret Ranch in Utah provides him with a diverse source of real-life knowledge.

A three-person panel will discuss the how-to and why of successful grazing practices, including species selection, fertility, management, stocking rates and economics. Producers Ray Fausak (Evansburg, AB) and Don Campbell (Meadow Lake, SK) will join Scott Wright (Forages Unit, Lacombe, AB) on the panel.

Other conference topics include:

- farming in Kazakhstan (Ray Gesshe, Olds College).
- Canadian forage industry (Duane McCartney, Ag Canada, Lacombe)
- selecting and managing forage species for grazing (Harvey Yoder, Alberta Agriculture, Lac LaBiche and Mona Kirkland, Scott, SK).
- developing a grazing system (Jim Bauer, Acme).
- maximizing profits with forages for cow/calf producers (Ron Noble, Marwayne and Wyett Swanson, Provost).
- rejuvenation of pasture (Ulla deBruijn, Ponoka and Bart Lardner, University of Saskatchewan).
- supplementation of grazing cattle (Dan Undersander, Wyoming).
- early pasture weaning (Christoph Weder, Alberta Agriculture, Vermilion and Pat Rutledge, Monitor).
- grazing alfalfa and other legumes (Greg Griffin, Bluesky and Bjorn Berg, Alberta Agriculture, Lethbridge).
- improving aspen pastures (Henry Rosing, Lake Francis, MB and Gerry Ehlert, Alberta Agriculture, St. Paul).

"*Select-a-Sessions* allow participants to choose the sessions of most interest to them," adds Lorene Cunningham with Alberta Forage Council. "There is also an evening 'bearpit' session planned for informal discussion with the speakers. Perhaps most importantly there will be ample time for attendees to exchange information and experiences with other conference participants."

A trade show of pasture-related exhibits and poster presentations from western Canada's forage and research associations provide further examples of grazing-related trials and demonstrations.

Complete registration fees for the two-day event are $100. For more information, or to register for the conference, contact Cunningham at the Alberta Forage Council office;
phone (403) 443-7544, fax (403) 443-7530 or
e-mail **abforage@telusplanet.net**

Contact: *Lorene Cunningham*
(403) 443-7544

Agri-News Briefs

Farm property assessment and taxation

A discussion paper by Alberta Municipal Affairs addresses the possible changes to farm property assessment and taxation. Specific issues addressed include:

- definition of farming operations;
- assessment of woodlots;
- valuation of farmland for property assessment purposes;
- intensive versus extensive agriculture operations;
- assessment of land not used for farming operations;
- farm residential site valuation for assessment purposes
- farm residential tax exemption;
- business tax on farming operations; and
- tax rate subclasses for farm property.

Each issue includes background information, options for consideration and associated impacts of each option. The paper also includes a section for comments on each specific issue. The deadline for comments on the paper has been extended to December 9, 1998. Copies are available at local municipal offices, MLA constituency offices or by calling 310-0000 and dialing 422-1377 or on the Internet at **http://www.gov.ab.ca/ma**

For further information, contact Dean Dyck, farm management specialist with Alberta Agriculture, Food and Rural Development, (403) 340-7007.

Canola industry goes to the tropics

The Canola Council's 32nd Annual convention is in Puerto Vallarta, Mexico from March 14 to 17, 1999. The theme of the '99 convention is Trade and Utilization and plenary sessions feature speakers from across North America. Mexico has shown itself to be a rapidly growing export market and to stimulate trade and provide for better information exchange, the Canola Council isn't waiting for Mexico to come to them, their taking the convention to Mexico. During the 4-day event, participants will have opportunities to interact with the Mexican industry and hear how better trade and oil and meal use can be fostered. As well as conference activities, tours, recreational events and a golf tournament are being planned. For further information about the convention, contact Dave Wilkins at (204) 982-2108 or e-mail: **wilkinsd@canola-council.org** or visit the Council's website: **www.canola-coucil.org/about/99convention/info.htm**

Farm machinery economics

Farm machinery decisions are part of every operation. Questions on whether to repair or replace; buy new or used; lease, buy or custom hire, are becoming more complex. Farmers wishing to learn the tools and skills of using sound economics and computer programs to analyze the various alternatives for equipment ownership and use will be interested in a Farm Machinery Economics course being held in Lethbridge on January 26 and 27, 1999 and againon February 8 and 9, 1999. Alternatives and choices will be discussed at length and consideration will be given to determining the appropriate farm equipment sizing based on an operation. For example, calculating the minimum annual acreage or hours of use to justify the investment. Cost of this two-day course is $165. To register, call Lethbridge Community College at (403) 320-3323.For further information, contact Brad Smith (403) 223-7907 or Gordon Williams (403) 330-3031.

New scholarship announced at Special Crops Conference

At the opening of the Special Crops Conference, ***Opportunities and Profits II Into the 21st Century***, CV Technologies, a local natural health products company and a conference partner, announced a scholarship for an undergraduate student at the University of Alberta. The scholarship was established in recognition of the interest of Alberta Agriculture in special crops, and in recognition of the importance of the contributions of the Special Crops Product Team. It is called the **AAFRD – Special Crops Product Team/CV Technologies Special Crops Scholarship**. The initial value of the scholarship is one thousand dollars ($1,000) annually. CV Technologies success is related and connected to scientific research and scientific excellence. They have established this scholarship in recognition of their work with the University of Alberta and Alberta Agriculture, Food and Rural Development - Special Crops Product Team. During the scholarship announcement, CV Technologies stated that they are honored to have these associations. For more information, contact Nabi Chaudhary at (403) 422-4054 or Wayne Goruk at (403) 427-3122.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51594 8509

Agri-News

November 30, 1998

Bee book for western Canada

Beekeeping and honey production are buzzing businesses in Alberta. They have grown every year as more Albertans set up hives or add colonies to their operations. In fact, the great weather Alberta experienced in 1998 helped beekeepers enjoy record honey production across the province.

"Alberta's honey crop increased by about 50 per cent in 1998," says Kenn Tuckey, provincial apiculturist with Alberta Agriculture, Food and Rural Development. "To assist this growing industry in British Columbia, Alberta, Saskatchewan and Manitoba, a new book, ***Beekeeping in Western Canada***, was produced. This reference book contains a wealth of information that both prairie beekeepers and people considering beekeeping will find valuable. It is the only book that focuses on helping beekeepers manage honey bees under prairie conditions."

Beekeeping in Western Canada is a 172 page, full-color comprehensive guide that will help beekeepers get started in beekeeping or help them manage their existing colonies better.

"The beekeeping book contains expert input from the provincial apiculturists in Canada's four western provinces and gives the best possible information on keeping bees on the prairies," says Tuckey. "Learning about the spring management of bees, winter feeding, honey extraction, honey bee health and marketing your beeswax, pollen and honey crops by reading is much more economical than learning by trial and error.

"Alberta is the largest honey-producing province in Canada, providing about 40 per cent of the nation's honey, so we can certainly bring in a 'honey of a crop.' For anyone wanting to know how to be part of such a growing industry, this new book will be a real benefit."

Beekeeping in Western Canada, Agdex # 616-4, costs $25.00 plus GST. It is available at all Alberta Agriculture district offices, by contacting the Alberta Agriculture Publications Office, 7000 - 113 Street, Edmonton, AB T6H 5T6 or by calling toll free in Alberta 1-800-292-5697 or (403) 427-0391 in the Edmonton area. When ordering by phone or mail, please add $2 (plus GST) shipping and handling fee.

Contact: *Kenn Tuckey*
(403) 415-2314

This Week

Bee book for western Canada 1

Thurber Report positive for agriculture 2

Increased emphasis on greenhouse crops research 2

Native plant production 3

Safety nets help Alberta's farmers 4

Alberta 4-H'er wins National Public Speaking Title 4

Report shows spills impact cattle 5

Briefs 6

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**
Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca
Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

Thurber Report positive for agriculture

The recently released Agricultural Lease Review report, also known as the Thurber Report, will have impacts on agricultural operations. The effects of the proposed changes set out several environmentally and agriculturally positive regulations that the industry will benefit from.

"The report reinforces long-term use of existing grazing lands in the settled area of the province, the 'White Area'," says Tom Thurber, MLA Drayton Valley/Calmar, and chairman of the Agricultural Lease Review Committee. "Grazing is a necessary part of any grassland ecosystem and the report supports the use of public lands for long-term grazing. It also tackles surface compensation and public access to public lands. These two recurring issues are specifically addressed."

A code of practice for grazing activities outlining the acceptable manner of grazing makes it possible for good land stewardship to be rewarded with longer tenure. It sets up guidelines and measures for use that are clear and which must be adhered to.

"The report states that the current method of setting and paying assignment fees will continue," says Thurber. "The one exception recommended in the report is that when shares of a corporation holding grazing leases are traded, an assignment fee is paid. This means shares traded in a corporation that holds a grazing lease will face the same assignment fee as individuals."

Approximately 25 per cent of Alberta's beef cow herds depend to some extent on public land for summer grazing and use private land mostly for winter feed. This means that 75 per cent of beef operators operate totally on private land for summer and winter feed needs. Removing oil and gas compensation revenue, except for compensation from damages, makes the public land lease arrangements similar to those typical of renting private land. This change will help eliminate the perception, that public land leases provide unfair 'cheap' grazing for some producers.

"The report comes out very strongly in support of family farms and ranches," adds Thurber. "Family assignments, either individual or corporate, will be charged a nominal flat fee that is less than fees paid outside families for transferring the lease. This way a family operation doesn't incur undue expense when working through succession from one generation to another, helping to preserve the integrity of the family farm."

Provision has been made to put in place mechanisms to monitor and control recreational access. The liability between the lease holder and the recreational public are more clearly defined, also. Having clearer guidelines regarding the roles and responsibilities of all parties and having in place a means of communicating between parties will help Albertans deal fairly and justly with this issue.

"Partial funding will be available for things such as resource enhancement, resolving multiple use conflicts, research and education that will further protect and enhance this natural resource," says Thurber.

Anyone interested in receiving a report can order one by telephone (403) 427-3595 (toll-free in Alberta by first dialing 310-0000) or download the report from Alberta Agriculture's website at: **http://www.agric.gov.ab.ca/ruraldev/publands/aglease/index.html**

Contact:	*Tom Thurber, MLA*	*Roger Marvin*
	(403) 415-0980	*(403) 427-3595*

Increased emphasis on greenhouse crops research

Alberta's greenhouse industry is a dynamic and vibrant component of Alberta's horticultural and agricultural sector. The industry is estimated at approximately 180 acres, with a value of $63 million annually to the Alberta economy.

Bedding plants, vegetables, cut and potted flowers, and tree seedlings make up the majority of the crops grown under the most intensive crop production systems known. Alberta's greenhouse industry has been expanding at a rate of seven to 10 per cent each year as the industry meets the challenge posed by greenhouse expansions in Ontario, British Columbia and the U.S.

"The Greenhouse Crops Program at the CDCS works to promote the sustained expansion of the Alberta greenhouse industry by improving crop production techniques and the development of alternative crops through a comprehensive research and extension program," says Jim Calpas, greenhouse research and extension specialist at Alberta Agriculture, Food and Rural Development's Crop Diversification Centre South (CDCS), Brooks. "The program in Brooks works in cooperation with its sister program at the Crop Diversification Centre North in Edmonton. Greenhouse extension has historically been the main focus of the Greenhouse Crops Program, but as the industry has developed, the research commitment of the program has increased."

Alberta has a distinct growing environment and crop production techniques developed in other growing areas does not always translate to Alberta greenhouse growing conditions. Alberta greenhouse growers require information generated in Alberta that is relevant to Alberta greenhouse growing conditions. "The program at Brooks operates out of approximately 20,000 square feet of research greenhouses," continues Calpas. "There is one full-time research and extension specialist and one full-time technologist position with an additional 10 month technologist position. Research

Cont'd on page 3

now accounts for approximately 60 per cent of the program's activities and 40 per cent is dedicated to extension."

The research program has both applied and basic components. Current applied research projects include; the investigation of using carbon dioxide enrichment for cost effective yield increases in greenhouse vegetable crops, Scotch bonnet peppers and Chinese vegetables as crop diversification opportunities for Alberta greenhouse vegetable growers and greenhouse statice as a crop diversification opportunity for cut flower growers.

"The major focus of the basic research component is the development of biological controls for the control of greenhouse crop disease problems," adds Calpas. "Currently research is directed at developing a biological control for Gray Mold caused by *Botrytis cinerea*, a common greenhouse disease which affects both ornamental and vegetable crops."

The Greenhouse Crops Program receives considerable support from Alberta greenhouse grower organizations such as the Red Hat Coop and the Alberta Greenhouse Growers Association. Support also comes in from the greenhouse supply industry. Alberta's greenhouse industry is increasing its commitment to research through partnering with the Greenhouse Crops Research and Extension program at CDCS.

Contact: Jim Calpas
(403) 362-1312

Native plant production

At the Native Plant Summit IV, held November 2 to 4, 1998 in Calgary, 230 growers, seed suppliers, researchers, consultants, native plant users, government and agency staff, students, and members of the general public gathered to hear experienced practitioners share their knowledge and expertise in growing and using native plants.

"In previous years, these Summits have been held in North Dakota and Saskatchewan, and there's a different theme each year," says Heather Gerling, with Alberta Agriculture, Food and Rural Development. "While some of the 230 attendees were from the U.S. and other provinces, 160 were from Alberta. It is great to see such interest in native plant production, attendance was up considerably from 150 in 1997."

The use of native plant materials has increased dramatically throughout North America in the last ten years. This increased demand has fostered the development of businesses growing native plant materials. The number of native plant growers in the western U.S., for example, has increased from five to 150 since the late 1980's.

"In Alberta, native plant materials have been used in reforestation and in other revegetation efforts since the 1970's," says Gerling. "However, the use of native plants for reclamation and urban naturalization in Alberta really started expanding in the last five years. As a result, supplies are extremely short and diversity of material is very limited. This was a major impetus for bringing this conference to Alberta."

Resource pooling and combining energies to develop innovative approaches to ensure the continued existence of native plant resources is needed. The Northern Great Plains Native Plant Committee (NGPNPC), a regional working group of the Federal Native Plant Conservation Committee, was formed in 1994. It includes members from North Dakota, South Dakota, northern Nebraska, eastern Montana, Wyoming and southern Alberta, Saskatchewan, and Manitoba. The intent is to bring together individuals, agencies and groups interested in management technology and local sources for native plant species.

The Summit featured 38 speakers addressing issues such as: industry challenges, how to get a local native plant industry up and running, the effects of government policy and guidelines on the industry, supply of and demand for native plant materials, how far materials should be moved, the ethics of wild seed harvesting and reflecting genetic variation in native plantings.

"Production of native grasses and production of native forbs (wildflowers) and woody plants, information on obtaining native species, germination and establishment, maintenance, harvesting, and processing of native plant material were of special interest to attendees," adds Gerling. The plenary sessions were videotaped and will be available soon in the Alberta Agriculture Multi-Media library. Audiotapes of all sessions will also be available through the Multi-Media library. Proceedings will be available in January.

An important outcome of the Summit was the formation of a committee to develop a table in the Canada Seed Act for grading seed of native species. A number of suggestions for changes to the current system were voiced, including the acceptance of tetrazolium chloride (TZ) tests for viability, seed grade tables that include individual seed counts for invasive species (now bulked together as other crop), GPS locations for source-identified seed from production fields, GPS locations for source-identified seed from production fields, confidential GPS locations for source-identified seed from wild harvest sites, and the use of accredited botanists as crop inspectors.

The new Draft Native Plant Revegetation Guidelines for Alberta was given to conference delegates. These guidelines are currently out for public review. The document can be viewed on the Public Lands website, **http://www.agric.gov.ab.ca/ruraldev/publands/nprg/**, or copies obtained by calling the Public Land Management Branch at (403) 427-3595.

Next year's Summit will be held in the United States, likely in North Dakota. The theme will be "Biodiversity". For copies of abstracts from Native Plant Summit IV and other conference information contact Gerling at 427-4658.

Contact: Heather Gerling (403) 427-4658

Safety nets help Alberta's farmers

Farmers who had it toughest in 1998 will be the first to get help under a six-point plan announced by Ed Stelmach, the Minister of Agriculture, Food and Rural Development.

"For many farmers, 1998 has been a very difficult year," says Stelmach. "The largest losses generally occurred in two areas: crop losses due to drought, and a substantial drop in hog income because of low prices. Our priority over the next few months will be to help those who need our safety net programs the most."

The areas most severely affected by drought conditions in 1998 include the eastern part of Alberta from Bonnyville in the north to Medicine Hat in the south, and several areas of the Peace. Losses in hog income occurred around the province.

The six-point plan includes:

1. priority processing for applications from hog producers and drought-stricken areas filed under the Farm Income Disaster Program (FIDP);
2. faster processing and settlement of crop insurance claims;
3. a more flexible Developing Farmer Loan to restore working capital and provide financial restructuring;
4. continued low interest rates on the Disaster Assistance/ Crop Loss loans, and payments that can be deferred for the first two years of the loan for farmers experiencing severe financial difficulties due to multiple years of crop losses;
5. continued availability of operating capital under the Alberta Farm Development Loan (AFDL) program offered through commercial lenders; and,
6. financial counselling services for all producers requiring assistance.

These programs exist to address drastic declines in farm incomes. No new programs are being announced, but producers have many effective options from which to choose.

The FIDP is a whole-farm safety net program available to all producers, whether or not they have purchased crop insurance. Crop insurance will cover losses specific to drought and Agriculture Financial Services Corporation's (AFSC) lending and disaster assistance loan programs can provide much-needed working capital and financial assistance.

AFSC is relocating insurance adjusters to the most severely affected areas, and claims staff are working overtime in several areas to ensure claims processing and delivery of cheques is faster than last year.

Settling claims faster is a province-wide priority for Alberta Agriculture, Food and Rural Development. "We plan to have the majority of insurance claims processed by Christmas – well ahead of 1997," says Stelmach. "Over the last few years, several changes have been made to Alberta's safety net programs to respond more quickly to specific disasters. These changes, combined with ensuring delivery times are improved, means producers will get the help they need faster."

Farmers requiring more information on these programs are encouraged to contact their local AFSC office.

Contact:	*Ron Glen*	*Andrew Church*
	(403) 427-2137	*(403) 679-1301*

Alberta 4-H'er wins National Public Speaking Title

Sixteen year old Amy Fox, from the Armena 4-H Beef club took top honours at the Canadian Young Speakers for Agriculture competition held at Toronto's Royal Winter Fair. Amy's speech titled *Call of the Land* dealt with the topic of inter-generational transfers of the family farm.

Amy was the youngest of 31 competitors from across Canada. Each competitor was required to give a five to seven minute prepared speech on a current issue in the agriculture industry. They also had to introduce and thank another contestant.

"The competition was at a very high level", says Kathy Hougham, provincial 4-H communication development specialist. "Fox had very stiff competition as most of the other contestants were in university."

Also competing from Alberta was Amanda Dixon, a member of the Spruce Grove 4-H Beef club.

Early this year Fox won the provincial 4-H public speaking competition in Calgary. Fox attends school in Hay Lakes and is a provincial 4-H ambassador.

Agritalk, Canada's first daily interactive agriculture show, sponsored Fox's airfare to Toronto. Other sponsors of Fox's trip were: Friends of Lacombe Outsiders 4-H Multi Club, West Central Region Fun Fair, Lacombe Agencies, Lacombe Tire, Bentley Agencies, and Judy Gordon. Amy's first place prize was sponsored by the Farm Credit Corporation.

For more information on joining 4-H call (403) 422-4H4H.

Contact: *Kathy Hougham*
(403) 422-4H4H

Report shows spills impact cattle

A new report released on November 19, 1998, details the field investigation of two cattle ranches located within four kilometres of a January 1994 sour gas pipeline leak. The ***1994 Livestock Field Investigations of two Ranches Associated with a Pipeline Break*** report contains information on the health status and disease conditions observed in the two cattle herds, provides exposure analyses and examines plausible causes and biological explanations of the adverse effects observed.

"This report is another step toward increasing our understanding of the impact that accidental releases of sour gas and condensate can have on the health of cattle," says Dr. Ralph Christian, executive director of the Alberta Agriculture Research Initiative, Alberta Agriculture, Food and Rural Development.

"The report is based on current veterinary medical knowledge of the causes of diseases in cattle, and as far as possible, provides veterinary medical explanations of the adverse effects observed," says Dr. Robert Coppock, DVM, manager of the Alberta Research Council's toxicology program, Vegreville. "Both ranches experienced an unexpected high mortality in neonatal calves following the spill and clean-up effort, that no consistent pattern of disease could explain."

The study demonstrates that spills can have an impact on cattle. Some of the documented effects, eye and respiratory irritation and nervous system effects, are consistent with exposure to irritating gases and/or petroleum hydro carbons.

Although not as easily defined, behavioral effects, such as aggression and estrous-like (in-heat) behaviour in a large number of pregnant cows, poor mothering in post-partum cows, failure to thrive in the calves and evidence of immune deficiency were also noted.

"Alberta is in a unique situation due to the high overlap between cattle and the oil and gas production areas," adds Christian. "Knowing what to do and what to expect in an unexpected, uncontrolled sour gas release situation is essential. It is hoped that this report will give some insight into the situation that occurred in 1994 and help producers plan ahead and be able to react quickly should another event occur."

The report deals only with the one sour gas spill incident, a leak estimated to have started on January 6, 1994. The estimated volume of petroleum released into the environment was 40 thousand cubic metres of sour gas and 50 m^3 of sour condensate. (Note: an error in the Executive Summary of the first print run of the report, states the estimated volume of sour gas released as 40 million cubic metres; this should read 40 thousand cubic metres.)

The report does not attempt to deal with the effects of air exposures in cattle in the field. More scientific data on dose-response relationships are needed before safe levels of exposure can be determined.

The report is available through the Publications Office, 7000 - 113 Street, Edmonton, AB T6H 5T6, or by calling toll free in Alberta 1-800-292-5697 or (403)427-0391 in the Edmonton area. Copies of the report are available for $15 plus GST. For mail orders, please add $2 (plus GST) shipping and handling fee.

Contact:	*Dr. Ralph Christian*	*Dr. Bob Coppock*
	(403) 422-1072	*(403) 632-8304*

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51595 5249

Agri-News Briefs

Finding agreement on difficult issues

Community decisions often require public involvement and input. With this comes an increase in the range and diversity of the 'points of view' to be considered. Unresolved conflict can be costly not just in terms of time and money but in the cost to relationships among people within a community or organization. A workshop, hosted by Alberta Agriculture, Food and Rural Development, is designed for those involved in public decision making. It will show participants how to constructively involve the public in important community decisions. Using case studies, participants will first discuss the process of public involvement, barriers, pitfalls and keys for success (one day workshop). There will be opportunities to practice these skills and apply the process to real life situations during the second part of the workshop. Dates and locations for the workshops are:

Workshop one – **An Introduction to Conflict Management**:

Ponoka	December 7, 1998
Sunnybrook Hall	January 19, 1999
Claresholm	TBA

Workshop two – **Finding Common Ground in Decision Making**:

Grande Prairie	February 11 - 12, 1999
Red Deer	TBA

Randy Leal of Conflict Management Systems, Edmonton, will deliver the workshops. For more information, contact: Tamara Lewis, Alberta Agriculture, Edmonton, (403) 427-3819 or Louise Starling, Alberta Agriculture, Red Deer, (403) 340-5306. If calling after January 25, 1999, remember some Alberta phone numbers change area code from 403 to 780.

Pulse production in central Alberta

Alberta Pulse Growers Commission (APGC) is holding a meeting for pulse growers on December 10, 1998, at 10:00 a.m. in the Black Knight Inn, Red Deer. As well as the annual meeting for Zone 2, APGC, the day-long session includes presentations on agronomy and weed control; the feed pea mission to China; use of feed pea in hog rations; zone pulse research in central Alberta; protein content of pea in central Alberta; and, pea markets and outlook. Registration for the meeting is $10, and may be paid at the door. For more information, contact Neil Miller, pulse and special crop specialist with Alberta Agriculture, Food and Rural Development, Lacombe (403) 782-3301.

Pricing workshops planned

Alberta Agriculture, Food and Rural Development's agri-food development branch is sponsoring a number of one-day pricing workshops across the province this winter. These regional workshops are aimed at food processors interested in marketing their products through a broker or distributor into the retail market. Products in a variety of food categories, including grocery, produce and meats, are targeted. The workshops are ideal for entrepreneurs planning to enter the retail market in the next 6 to 24 months, or who have their first retail contract. Dates and locations are:

• December 9	Morinville	Janice McGregor (939-4351)
• January 12	Grande Prairie	Karen Goad (538-5285)
• January 19	Red Deer	Joyce Lencucha (340-5358)
• January 26	Camrose	Marian Williams (679-1210)
• February 2	Medicine Hat	Karen Hoover (381-5130)
• February 3	Vulcan	Jan Warren (485-2236)

Please register at least one full week in advance to ensure a place in the workshop. Government numbers are toll free by dialing 310-0000 first and then dialing the number.

Farmland values

Farm Credit Corporation (FCC) estimates that Canadian farmland values rose 2.2 per cent from January 1998 to July 1998. The increase estimated for Alberta farmland for that same time period is 4.9 per cent. FCC contributes the south and central regions of Alberta for driving the land price trend. Irrigated and special crop land increased in value considerably, influenced by announcements of industry growth, such as the potato processing plant in Taber. In northern Alberta, farmland prices were reported as weak to stable for the same six-month period. For further information on farmland value in western Canada, contact Roy Hjelte at (306) 780-3489, Regina, Saskatchewan.

Agri-News

December 7, 1998

Alberta pledges fast, flexible loans for hog producers

Alberta hog producers can get a quick cash injection of up to $50,000, as part of a re-designed package of bridge financing options intended to assist producers dealing with an industry-wide credit crisis.

"The hog industry in Alberta is facing unprecedented low prices caused by uncontrollable global factors," says Ed Stelmach, Minister of Alberta Agriculture, Food and Rural Development. "Everyone recognizes that the hog industry is cyclical in nature, but no one could have predicted that prices would fall this far, this fast."

Producers can now get a quick cash injection of up to $50,000, as part of a redesigned package of bridge financing options. The changes include provisions made under the Agriculture Financial Services Corporation (AFSC) Developing Farmer Loan Program:

- the maximum amount available under a "quick injection" loan is being increased from the current $15,000 to $50,000; and,
- producers will have an option to defer payments for principle and interest during the first two years of the loan.

Preliminary estimates are that up to $15 million in funds could be advanced under this initiative. Hog producers are encouraged to contact their local AFSC loans office to make an appointment to discuss their options.

Changes have also been made to the Farm Income Disaster Program (FIDP), to allow outstanding accounts payable to be included in the application and to recognize producers' year-end that are different from December 31. These producers will be able to apply under FIDP sooner than in the past.

The revamped Developing Farmer Loan program is available to producers to restore working capital and assist with financial restructuring. FIDP is available to producers suffering from disastrous declines in whole-farm income. Both programs are administered by AFSC.

Cont'd on page 2

This Week

Alberta pledges fast, flexible loans for hog producers 1

Background information on the changes to Developing Farmer Loan and FIDP 2

A chilling development 3

Horse conference in Red Deer 3

Water erosion potential on Solonetzic soils 4

Briefs 6

Coming Agricultural Events 7

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

"These changes open up a number of financial options for all hog producers in the province," says Roger Charbonneau, chairman of the Alberta Pork Producers Development Corporation. "We are dealing with desperate financial times. These new options will help hog producers stabilize their operating credit and begin the process of rebuilding."

"It's clear that Alberta has the best combination of safety nets in the country," adds Stelmach. "These changes provide several options for the hog industry during difficult times. We're continuing to offer better flexibility to producers without aggravating existing international trade agreements, so everybody benefits."

AFSC is a provincial Crown corporation with 49 offices across Alberta. It provides farmers and agri-businesses with unique financial services, including crop insurance, income protection and financing.

Contact: *Ron Glen* *(403) 679-1301* *Andrew Church* *(403) 427-2137*

Background information on the changes to Developing Farmer Loan and FIDP

The changes to Agriculture Financial Services Corporation's (AFSC) Developing Farmer Loan and Farm Income Disaster Program (FIDP) are designed to respond to the needs of producers experiencing a severe decline in farm income. Producers should contact their local AFSC loans office to make an appointment to discuss their options.

- **Developing Farmer Loan:**

  The Developing Farmer Loan program provides flexibility in addressing a wide range of financial needs due to an agricultural setback, including restoration of working capital and financial restructuring.

  When funds are needed to restore working capital or settle outstanding accounts payable, the "quick injection" provision allows access to loans of up to $50,000. The previous maximum allowed under this provision was $15,000.

  The program has been expanded to include the deferral of principal and interest payments during the first two years of the loan. This provision was previously only available to farmers suffering multiple years of crop losses. Interest will be amortized over the remaining balance of the loan period. Loan repayment periods are available for up to 20 years.

  Developing Farmer Loans are available at competitive commercial interest rates, and rates are fixed for the life of the loan to encourage long-term financial stability. The maximum amount available to producers under the Developing Farmer Loan is $1 million.

- **Farm Income Disaster Program (FIDP);**

  FIDP is a whole-farm safety net program, and all agricultural commodities are eligible. If a farm's annual net margin in 1998 (the difference between allowable farm revenue and expenses) falls below 70 per cent of the farm's average of the previous three years, producers could be eligible for a FIDP payment, up to the 70 per cent margin level.

  Application forms will be available from local AFSC offices in January, 1999. There is no premium to pay, but a $50 application fee is required. Farmers need to include information from their 1998 income tax return (plus the previous three years) along with the FIDP application.

  Some recent improvements to the FIDP program have been made. The first is the inclusion of eligible outstanding accounts payable in the application process. Previously, producers had to pay accounts by December 31 in order for the amount of the expense to be included in the FIDP application. The new provision allows the inclusion of the difference between the beginning and end of year accounts payable, including those not yet paid, to ensure an accurate year end farm income is reflected.

  The second significant change to the FIDP program is that the application deadline has been changed, to seven months after the year-end date of the applicant's farm business. Previously, the deadline for all FIDP applications was July 31 of the year following a producer's claim year, regardless of when that year-end fell. So, a producer with a year-end of March 31, 1997 would previously have had a deadline of July 31, 1998. The change means producers with year-end dates other than December 31 no longer have to wait as long to apply for FIDP.

A chilling development

Alberta produce is high in quality and flavour when first harvested. However, compared with imported produce, Alberta fruits and vegetables do not keep as long on the market shelf. This is because the heat contained in the produce is not quickly removed after harvest.

Produce quality and flavour can be preserved after harvest by cooling. The Agricultural Value-added Engineering Centre (AVEC), together with Alberta Market Gardeners Association (AMGA) is working toward designing and developing cooling methods for market gardeners in the province. AVEC is a program administered by the engineering services branch of Alberta Agriculture, Food and Rural Development.

"The need to cool produce as soon as it is harvested is an essential part of horticultural production," says Ike Edeogu, an engineer with AVEC. "Just like refrigeration of food stuffs in a home, cooling fruits and vegetables after harvest helps maintain produce quality and freshness for longer periods. When heat is removed, natural spoiling processes are slowed down. The rate of deterioration or spoiling is directly proportional to the amount of heat contained in the produce."

Alberta Agriculture undertook the task of helping market gardeners find solutions to the problems associated with the introduction and application of cooling techniques in their operations. While the benefits are clear, the cost of cooling units can be prohibitive.

Work on the development of a cooling system for produce grown in Alberta has been on-going for three years. The outcome has favoured using ice, rather than direct refrigeration, as the cold source for cooling.

"Ice can be used to chill water which is then used to hydro-cool produce," says Edeogu. "It can also be directly applied to containerized produce. A third effective method is to chill air by directing the air through a bed of ice chunks, for example ice cubes. This method of forced-air cooling uses the ice-chilled air to cool the produce."

The multi-functional nature of ice as a cold source is definitely an advantage to market garden operations. It eliminates the need to purchase cooling equipment for each technique. As well, unlike direct refrigeration systems, the daily ice production requirement can be lessened by spreading it out over time. The outcome would be smaller and cheaper equipment.

This year, a prototype forced-air cooler, designed to fit on the back of a pick-up truck, was built by AVEC. It consists of a 40 x 48 inch plastic pallet bin, for the ice bed; a 12 x 48 inch duct with openings to allow air through; and a 40 x 48 inch plastic pallet to stack 20 x 24 x 9 inch plastic containers. A $300 centrifugal fan was mounted in the cooler and powered by a $400 four-horsepower gasoline engine. The fan was linked to the gas engine by a belt, pulleys and a shaft. The gas engine was mounted in a compartment built into the outside wall of the cooler. A trap door was also built in the outside wall of the cooler to allow participants to view and demonstrate the ice bed compartment and to load the ice into the pallet bin.

"Preliminary trials on the performance of the prototype cooler were conducted in August 1998," adds Edeogu. "The results were satisfactory and enabled some modifications to be made to the unit to make it more efficient."

In addition, field demonstrations and displays were conducted so producers could see the prototype cooler and offer their comments about it. Over 20 growers saw the cooler this year.

"The outcome of the demonstrations and displays of the forced-air cooler was successful," concludes Edeogu. "Producers in various parts of Alberta had the chance to see it in operation and were excited and supportive of the project. There are still some issues related to the design, ice bed configuration, operation of the cooler and minimizing capital and operating costs that still need to be addressed. These issues continue to be investigated and worked on by AVEC."

A factsheet on precooling, its benefits and the design and operation of a portable forced-air cooler is being published and should be available in the first quarter of 1999.

Contact: *Ike Edeogu*
(403) 415-2359

Horse conference in Red Deer

Each year in Alberta, the horse industry section of Alberta Agriculture, Food and Rural Development organizes the ***Alberta Horse Breeders and Owners Conference***. This event is the premier horse conference in North America. The 1999 conference is scheduled for January 8, 9 and 10, 1999 at the Capri Centre in Red Deer.

"The conference is an event Alberta horse enthusiasts always enjoy," says Les Burwash, manager of equine programs with Alberta Agriculture. "The internationally recognized speakers on the agenda and the chance to meet and talk to other horse breeders and owners make the conference an event well worth attending."

The topical issues that will be addressed at the 1999 conference include:

Horse Health

- *Correlation of Radiographs in Yearlings to Soundness in Mature Horses* – Dr. Wayne MCIlwraith, professor of surgery and director of equine sciences at Colorado State University, Fort Collins, Colorado
- *New Horizons in Therapeutic Shoeing and Hoof Care* – Rod Sigafoos, American Farrier Association certified journeyman farrier and head of the Horseshoe Research Laboratory, Kennett Square, Pennsylvania

Cont'd on page 4

- *When Good Drugs Do Bad Things* – Dr. Trish Dowling, teaches clinical pharmacology at the Western College of Veterinary Medicine, Saskatoon, Saskatchewan
- *Trailer Safety* – David Wilson, Santa Rosa Junior College, Santa Rosa, California

Equine Nutrition

- *More Than Ever, Horses Need Forage* – Dr. Bob Coleman, horse extension specialist and equine nutritionist, University of Kentucky, Lexington, Kentucky
- *Significance of Water Quality and Quantity on Horse Health* – Dr. Nadia Cymbaluk, managing veterinary at Linwood Equine Ranch, Carberry, Manitoba
- *What's New in Equine Nutrition Research* – Dr. Bob Colman, horse extension specialist and equine nutritionist, University of Kentucky, Lexington, Kentucky

The Horse Industry

- *Trends in the Horse Industry* – Julie Kimball, director of market development for the American Paint Horse Association, Fort Worth, Texas
- *Producing and Marketing Ranch Horses* – Glenn Blodgett, Burnett Ranches Ltd. Horse division director, Guthrie, Texas
- *Texas Ranch Horse Program* – Dr. Glenn Blodgett, Burnett Ranches Ltd. Horse division director, Guthrie, Texas
- *Taxation and Horse Cents* – Fred Mertz, Canada/Alberta Farm Business Management Program board member, Calgary, Alberta

Purchasing the Right Horse

- *Pre-purchase Examinations on Performance Horses* – Dr. Dan French, board certified in equine surgery, Okotoks, Alberta
- *The Value of a Versatile Horse* – Joyce Loomis reining and barrel horse trainer, Wayne, Oklahoma
- *The Backyard Race Horse* – Janet Del Castillo, horse trainer and the author of the book "Backyard Racehorse", Winter Haven, Florida
- *Dealing With Horses in Transition... Changing Their Lifestyle* – Dr. John Steiner, American College of Theriogenologists, Lexington, Kentucky

"The main areas of interest covered by our guest speakers include, nutrition; horse health care; new training practices; and, the horse industry as a business," adds Burwash.

The conference program is designed for a particular breed preference, Arabian, Quarter Horse, Thoroughbred and all breeds. However, conference participants can attend any of the sessions and will receive the printed materials from all sessions.

"Each year, a special, social event is planned for the conference and this year we have arranged for Brian Keating, head of Conservation Outreach Calgary Zoological Society, to present *Secret Springs: Classic Wild Africa* on Saturday evening," says Burwash.

Conference registration is $75 per person. For more information about the 1999 conference, contact Burwash in Airdrie at (403) 948-8538.

Contact: *Les Burwash*
(403) 948-8538

Water erosion potential on Solonetzic soils

In Alberta, about 30 per cent of the arable land falls into the Solonetzic soil category. A characteristic feature of this soil is an impermeable hardpan at five to 30 centimetres from the soil surface. This hardpan limits water infiltration and root penetration, and results in increased runoff. The resulting water erosion removes valuable top soil, making land less productive.

"Producers often ask how current farm practices impact the sustainability of soil productivity," says Andy Jedrych, design engineer with the conservation and development branch of Alberta Agriculture, Food and Rural Development. "They want to know whether crop rotation, residue management and conservation tillage are helping maintain soil productivity or are they contributing to soil degradation.

"Water erosion potential on agriculture land on Solonetzic soil has been studied for the past four years in central Alberta, near Tofield. Sediment delivery and runoff rates from two one-acre watersheds and from two 0.044 plots during spring snow melt and summer rainfall events have been monitored. Rainfall effect on water erosion under continuous cropping, summerfallow and different residue levels soil conditions were examined."

Results of the study show that almost 57 per cent of the total runoff volume from the two watersheds and two erosion plots can be attributed to summer rainfall events. However, more than 90 per cent of total soil loss was credited to these events. This finding contradicts a general belief that most soil loss in Alberta occurs during snow melt events.

When rating rainfall events, a likelihood of a similar event occurring is used to measure the event. A common rainfall event is given a two-year return period, meaning that there is every likelihood to expect a similar amount of rain from a single storm at least every two years. Severe rainfall events, which happen less often, are rated similarly. A 50-year return period rating, for example, identifies a storm of significant magnitude that should only be expected once in 50 years.

Cont'd on page 5

"In this study, most low-intensity rainfalls, those having a return period of every two to five years, had little impact on the total soil loss," says Douwe Vanderwel, soil and water conservation engineer with Alberta Agriculture. "However, the two historical single storm events, one in 1996 and one in 1998, with a frequency of more than a 10 and 50 year return period, accounted for nearly 70 per cent of total soil loss during the four-year study period."

During the 1998 growing season, soil loss was monitored from watersheds under summer fallow and continuous cropping conditions. Normally, under the same cropping system, one watershed was delivering twice as much sediment at the other one. However, under fallow conditions, the same watershed delivered over 10 times more sediment. This data suggests that soil loss on a summer fallow field is about five times higher than on a continuous cropping field.

"During the 1996 monitoring year, two storms, both with a 10 year return period, occurred over the summer, one in August and one in September," adds Jedrych. "The August storm occurred before crop swathing, when the soil surface had 76 per cent canopy cover and only four per cent residue cover. The September rain occurred after crop harvesting and combining, when the soil surface had nearly 100 per cent residue cover. Soil loss caused by the September storm was negligible. However, soil loss caused by the August storm was 22 to 47 times higher on the watersheds. These results are a direct measurement of the benefit of maintaining a good crop residue cover on a soil surface."

Contact:	*Andy Jedrych* *(403) 427-3692*	*Douwe Vanderwel* *(403) 427-3629*

Agri-News Briefs

Holistic agriculture and resource management

A one-day seminar on holistic management of Alberta's agricultural and natural resources is planned for January 22, 1999 at the Westerner Park, Red Deer. Alan Savory, a renowned international speaker, wildlife biologist and the founding director of the Centre for Holistic Management is the day's speaker. A new book by Savory has received much praise from agricultural organizations and publications such as the Stockman Grass Farmer and the Rocky Mountain Institute. Benefits to managing holistically include: improving land base while increasing production and profits; cutting down or eliminating petrochemical inputs without sacrificing crop or livestock conditions; the framework for holistic decision making requires no specialized knowledge or elaborate technology and is applicable in every environment and management situation. Cost of the seminar is $75 plus GST per individual and $125 plus GST per couple. For further information or to register, contact Randee Halladay at 1-800-946-5476.

Introducing AI in swine herds

Introducing and using artificial insemination in swine herds is the main topic at the Swine Stockhandlers' Workshop. The workshop is scheduled for the afternoon of January 12, 1999 at Olds College, Animal Science Building, Room 614. Phil Burke, gene transfer service manager for PIC, USA is the guest speaker. He is responsible for introducing, monitoring and troubleshooting AI in PIC multiplication and commercial herds. He is also an expert on boar stud design and management. Having spent considerable time on small and large sow operations in the US and England, Burke will have much information to share with Alberta producers managing herds of any size where AI is being used or being introduced. The workshop includes hands-on opportunities. Participants will be able to work with reproductive tracts to gain a better understanding of the anatomy of sows, and they will work with semen to learn techniques to improve AI success and learn methods to evaluate semen quality. Live animals will not be used. Cost of the workshop is $40 (including GST) for the first person from a farm and $35 for each additional person from the same operation. Space is limited, and pre-registering before January 8, 1999 is recommended. For more information or to register, contact Michelle Follensbee (403) 415-0828 (government numbers are toll free by dialling 310-0000 first) or e-mail: michelle.follensbee@agric.gov.ab.ca

Farm safety campaign wins the Golden Ribbon

The Canadian Association of Broadcasters Golden Ribbon Award is awarded annually. This year, in the Community Service category, Alberta's ***Win With Farm Safety*** was awarded the honour. The safety campaign was initiated jointly with CISA TV in Lethbridge and Alberta Agriculture, Food and Rural Development's Farm Safety Program. CISA TV made a commitment to promote the benefits and report on agriculture, a commitment evident in their daily newscasts, in-depth weather reports and agriculture programming. The campaign was launched in two phases. During the introduction phase, the safe farm concept was communicated to farm families. Alberta farm families were asked to explain their common-sense approach to safety and highlight their home-grown safety inventions. Based on submissions, six TV commercials were produced and aired. The second phase of the campaign consisted of a contest for grade five students. The students were asked to produce a two to three minute video or a book presentation on farm safety. Six of the entries were selected and took centre stage during the North American Seed Fair in Lethbridge. The public was asked to choose the best entry and Eastbrook Elementary School was judged to be the public's choice. The *Win With Farm Safety* was a positive message campaign designed to make an impact on Alberta's agricultural community and it succeeded.

Coming Agricultural Events

December, 1998

Farm Business Management & Analysis
November 30 - February 1, 1999
Lethbridge
Fee: $450.00
Contact: Bradley Smith
(403) 223-7907 Fax: (403) 223-3396

Farm Accounting Using Quickbooks
December 7 - 14
Claresholm
Fee: $195.00
Contact: Bradley Smith
(403) 223-7907 Fax: (403) 223-3396

Understanding Farm/Ranch Resources for Manure Management
December 7 - 8
Provincial building, Hanna
Fee: $125.00 includes aerial photograph and lunch both days
Contact: Tamara Lewis
(403) 427-3819 Fax: (403) 422-0474

Farming for Profit
December 8
Douglas Theatre, Agriculture Centre
Airdrie
Contact: Ted Darling
(403) 948-8524 Fax:(403) 948-2069

Alberta Winter Wheat Producers Commission Annual Meeting
December 8
Sven Ericksen's Restaurant
Lethbridge
Fee: Pre-Reg. $25, Reg. at meeting $30
Contact: S. Siewert
(403) 328-0059 Fax: (403) 328-0969

All About Beef
December 8
Provincial Building, Vermilion
Fee: $5.00
Contact: Christoph Weder
(403) 853-8101 Fax: (403) 853-4577

Farm Accounting Using Quickbooks
December 9 - 11
High River
Fee: $195.00
Contact: Bradley Smith
(403) 223-7907 Fax: (403) 223-3396

Farm Accounting Using Quickbooks
December 9 - 11
Foremost
Fee: $195.00
Contact: Bradley Smith
(403) 223-7907 Fax: (403) 223-3396

Profit Management for the Hog Industry Seminar
December 9
Red Deer Lodge Hotel
Red Deer
Contact: Art Lange
(403) 632-5423 Fax: (403) 632-5495

Understanding Farm/Ranch Resources for Manure Management
December 9 - 10
Provincial Building, High River
Fee: $125.00 includes aerial photograph and lunch both days
Contact: Tamara Lewis
(403) 427-3819 Fax: (403) 422-0474

Alberta Pulse Growers Zone 2 Annual Meeting
December 10
Black Knight Inn
Red Deer
Contact: Alberta Pulse Growers Commission
(403) 986-9398 Fax: (403) 986-9398

Pulse production in central Alberta
December 10
Black Knight Inn
Red Deer
Fee: $10
Contact: Neil Miller
(403) 782-3301 Fax: (403) 782-5514

Farming For Profit
December 10
Community Hall, Westlock
Contact: Bob Winchell
(403) 674-8213 Fax: (403) 674-8362

Peace Country Elk Expo & Select Sale
December 11 - 12
Evergreen Park
Grande Prairie
Contact: Harriet T. Pollon
(403) 766-2807

Understanding Farm/Ranch Resources for Manure Management
December 14 - 15, 1998
Provincial Building, Airdrie
Fee: $125.00 includes aerial photograph and lunch both days
Contact: Tamara Lewis
(403) 427-3819 Fax: (403) 422-0474

Silage Symposium
December 14
St. Vincent Hall
St. Vincent
Fee: $25.00
Contact: Harvey Yoder
(403) 623-5218 Fax: (403) 623-5422

1998 Silage Symposium & Silage Workshop
December 15
Legion Hall, Vermilion
Contact: Christoph Weder
(403) 853-8101 Fax: (403) 853-4577

All About Beef
December 15
Hardrive Cafe
Dewberry
Fee: $5.00
Contact: Christoph Weder
(403) 853-8101 Fax: (403) 853-4577

Silage Symposium and Workshop
December 16
9:30 am - 4:30 pm
Lacombe
Fee: $25.00
Contact: Harvey Yoder
(403) 623-5218 Fax: (403) 623-5422

Understanding Farm/Ranch Resources for Manure Management
December 16 - 17
Black Gold Inn, Gold Room
Drayton Valley
Fee: $125.00 includes aerial photograph and lunch both days
Contact: Tamara Lewis
(403) 427-3819 Fax: (403) 422-0474

January, 1999

(In January 1999, the new area code 780 comes into effect for central and northern Alberta. For more information, contact Tesus at 1-888-223-0300.)

Farm Succession Resource Fair
January 2, 1999
Provincial Building, Medicine Hat
Contact: Bradley Smith
(403) 223-7907 Fax: (403) 223-3396

Land & Crop Management Using Precision Farming Software (FarmTrac)
January 6 - 8, 1999
Lethbridge
Fee: $185.00
Contact: Bradley Smith
(403) 223-7907 Fax: (403) 223-3396

Western Canadian Wheat Growers Association Annual Convention
January 6 - 8
Sheraton Cavalier
Saskatoon, Saskatchewan
Fee: To Dec 15 - $185; after Dec. 15 - $210
Contact: WCWGA Office
Fax: (306) 586-2707, Saskatoon, SK

Alberta Horse Breeders and Owners Conference
January 8 - 10
Capri Centre
Red Deer
Fee: $75
Contact: Les Burwash
(403) 948-8538

Swine Stockhandler's Workshop
January 12
Olds College
Contact: Michelle Follensbee
(403) 415-0828 Fax: (403) 427-1057

Banff Pork Seminar
January 12 - 15
Banff Centre
Fee: $165.00 plus GST, before Dec. 15, 1998, $215 after (1998 rates, subject to
revision)
Contact: Ruth Ball
(403) 492-3236 Fax: (403) 492-9130

All About Beef
January 12
Provincial Building, Vermilion
Fee: $5.00
Contact: Christoph Weder
(780) 853-8101 Fax: (780) 853-4577

Positive Public Relations
January 14 - 21
Legion Hall, Berwyn
Fee: $25.00 includes 2 lunches (two days of workshop)
Contact: Margurite Thiessen
(780) 836-3351 Fax: (780) 836-3529

Seed Plant Convention
January 14 - 16
Westin Hotel
Edmonton
Contact: Bill Witbeck
(780) 782-4641 Fax: (780) 782-5514

Farm Accounting Using Quickbooks
January 14 - 22
Medicine Hat
Fee: $195.00
Contact: Bradley Smith
(403) 223-7907 Fax: (403) 223-3396

Peace Country Beef Congress
January 15 - 16
J. E. Hawker Pavilion, Fairview College
Fairview
Contact: Brad Fournier
(780) 835 2291 Fax: (780) 835 3600

Focus On Agriculture Conference
January 15 - 16
Kinsmen Community Center
Ponoka
Contact: Joyce Crandall
(403) 783-5777 Fax: (403) 783-5776

Cattlemen's Corral Crop Visions
January 19 - 20, 1999
Agricultural Exhibition Grounds
Lloydminster
Contact: Terry Buss
(780) 853-8101 Fax: (780) 853-4577

Farm Succession Planning – Provincial Tour
January 19
Lethbridge Lodge, Lethbridge
Fee: $50 first person and $25 each additional family member
Contact: Brad Smith
(403) 223-7907

Farm Succession
January 19
Lethbridge Lodge
Lethbridge
Fee: $50/person, $25/additional family member
Contact: Bradley Smith
(403) 223-7907 Fax: (403) 223-3396

Agronomy Update
January 21 - 22
Lethbridge Lodge Hotel
Lethbridge
Fee: $80.00
Contact: Rob Dunn
(403) 381-5351 Fax: (403) 382-4526

Farm Succession Planning – Provincial Tour
January 21
Crossroads Hotel
Calgary
Fee: $50 first person and $25 each additional family member
Contact: Ted Darling
(403) 948-8524

Holistic Management Seminar (Allan Savory)
January 22
Westerner Park
Red Deer
Fee: $75 each or $125/registrant & spouse
Contact: Randee
1-800-946-5476

Agriculture and Food Council – Leaders Challenge Conference
January 22 - 23
Capri Centre
Red Deer
Contact: Jean Wilson
(403) 415-2146 Fax: (403) 427-5220

Agriculture and Resource Management for the 21st Century
January 22
Westerner Park
Red Deer
$75.00/person or $125.00/couple (+GST)
Contact: Randee Halliday
1-800-946-5476 Fax: (430) 729-2472

Alberta Veterinary Medical Association Annual General Meeting
January 22
Westin Hotel
Calgary

Farm Machinery Economics
January 26 - February 9
Animal Husbandry Bldg. - L.C.C.
Lethbridge
Fee: $165.00
Contact: Bradley Smith
(403) 223-7907 Fax: (403) 223-3396

Farm Succession Planning – Provincial Tour
January 26
Denham Inn
Leduc
Fee: $50 first person and $25 each additional family member
Contact: Dean Dyck
(780) 340-7007

All About Beef
January 26
Hardrive Cafe
Dewberry
Fee: $5.00
Contact: Christoph Weder
(403) 853-8101 Fax: (403) 853-4577

1999 Provincial Agricultural Service Board Conference
January 26 - 28
Convention Centre, Calgary
Contact: Doug Henderson
Phone: (403) 526-2888

Alberta Branch CSGA Annual Meeting
January 27 - 29
Westin Hotel
Edmonton
Contact: Bill Witbeck
(780) 782-4641 Fax: (780) 782-5514

Farm Succession Planning – Provincial Tour
January 27
Golden Inn
Grande Prairie
Fee: $50 first person and $25 each additional family member
Contact: George Monner
(780) 835-2241

Advance Farm Accounting
January 28 - 29
Lethbridge
Fee: $155.00
Contact: Bradley Smith
(403) 223-7907 Fax: (403) 223-3396

February, 1999

Agri Future Farm Technology Expo
February 3 - 5
Westerner Park
Red Deer
Contact: Alberta Conservation Tillage Society
(403) 572-3600 Fax: (403) 572-3605

Alberta Pulse Growers Annual Meeting
February 5
Westerner Park
Red Deer
Contact: Alberta Pulse Growers Commission
(403) 986-9398 Fax: (403) 986-9398

Beginner Sheep Production
February 6 - 7
Olds College
Contact: Olds College Extension Office
Phone: (403) 556-8344

Farm Estate/Transfer Planning Workshop and Resource Fair
February 8
Falher
Contact: Margurite Thiessen
(780) 836-3351 Fax: (780) 836-3529

Farm Estate and Transfer Planning Workshop and Resource Fair
February 9
Grimshaw
Fee: $50/person (and $30 for the second person from your farm operation)
Contact: Margurite Thiessen
(780) 836-3351 Fax: (780) 836-3529

Farm Accounting Using Quickbooks
February 10 - 12
Lethbridge
Fee: $195.00
Contact: Bradley Smith
(403) 223-7907 Fax: (403) 223-3396

Farm Estate/Transfer Planning Workshop and Resource Fair
February 10
Provincial Bldg, Grande Prairie
Fee: $50.00/person ($30 for additional person from same farm operation)
Contact: Margurite Thiessen
(780) 836-3351 Fax: (780) 836-3529

Western Barley Growers Annual Conference
February 11 - 12,
Banff Park Lodge
Contact: Kathy Cooper
(403) 291-3630 Fax: (403) 291-9841

Farm Machinery Economics
February 15 - 23
Taber
Fee: $165.00
Contact: Bradley Smith
(403) 223-7907 Fax: (403) 223-3396

Advanced Precision Farming Course Using Farm Trac & Farm Site
February 25 - 26
Animal Husbandry Building
Lethbridge
Fee: $200
Contact: Bradley Smith
(403) 223-7907 Fax: (403) 223-3396

Grain World: Agriculture Outlook Conference
February 28 - 2
Lombard Hotel
Winnipeg, Manitoba
Fee: $200 before Feb 5; $225 after
Contact: Caroline Wiley
(204) 983-4236 Fax: (204) 983-4993

March, 1999

Land & Crop Management Using Precision Farming Software (FarmTrac)
March 1 - 8
Taber
Fee: $185.00
Contact: Bradley Smith
(403) 223-7907 Fax: (403) 223-3396

Western Canada Dairy Seminar
March 9 - 12
Capri Centre
Red Deer
Contact: David Croy
(403)381-5106

Peace Country Classic Agri-Show
March 11 - 13
Evergreen Park
Grande Prairie
Contact: Randy J. Whelan
(780) 538-0144

Alberta Association of Agricultural Societies (AAAS) Annual Meeting & Convention
March 19 - 21
Coast Plaza Hotel
Calgary
$115.00/delegate & $70.00/ guest package
Contact: Wendy Pruden
(403) 427-2174 Fax: (403) 422-7755

April, 1999

Sheep shearing and wool handling
April 3 - 4
Olds College
Contact: Olds College Extension Office
(403) 556-8344

May, 1999

12th World Meat Congress
May 17 - 20
Dublin, Ireland
Contact: Lena Williams, Bord Bia
Phone: +353 1 668.5155

June, 1999

Alberta Women's Institutes 90th Anniversary Convention
June 9 - 10
Olds College
Contact: Alberta Women's Institutes, Executive
(403) 488-5282 Fax: (403) 488-5282

July, 1999

Crop Improvement Day 99
July 6
Field off #9 Highway NE-10-28-3-W4
Oyen
Contact: Trevor Wallace
(403) 664-3899; Fax: (403) 664-2549

Calgary Stampede
July 9 - 18
Stampede Park
Calgary

Agricultural Service Board Provincial Tour, Summer 1999
July 13 - 16
Omniplex, Drayton Valley
Contact: Tennie McCracken
(780) 542-7777

13th International Farm Management Congress
July 19 - 24
Holiday Inn
Durban, South Africa, Natal
Fee: est $600 US
Contact: J. Wilson Loree
(403) 556 4213 Fax: (403) 556 7545

August, 1999

Agriculture Institute of Canada Annual Conference
August 8 - 10
University of Prince Edward Island
Charlottetown, P.E.I.
Contact: Kais Deelstra
(902) 368-4842 Fax: (902) 368-4857

September, 1999

XXXVI International Apicultural Congress
September 13 - 18
Vancouver Trade and Convention Centre
Vancouver, B.C.
Contact: Apimondia '99

World Dairy Expo
September 29 - 3
Dane County Expo Center
Madison, Wisconsin
Contact: World Dairy Expo
(608) 224-6455 Fax: (608) 224-0300

November, 1999

Red Deer International Agri-Trade
November 10 - 13
Westerner Park, Red Deer
Contact: Pat Kennedy
(403) 343-7800
July, 2000

Calgary Stampede
July 7 - 16, 2000
Stampede Park
Calgary
August, 2000

World Poultry Conference
August 20 - 25, 2000
Palais Des Congres
Montreal, Quebec
Contact: Events International Meeting Planners
(514) 286-0855 Fax: (514) 286-6066

October, 2000

World Dairy Expo
October 4 - 8, 2000
Dane County Expo Center
Madison, Wisconsin
Contact: World Dairy Expo
(608) 224-6455 Fax: (608) 224-0300

July, 2001

XIV International Plant Nutrition Colloquium
July 28 - 3, 2001
University of Hannover, Germany
Contact: IPNC Secretariat
Phone: +49-(0)511-762-2626
Fax: +49-(0)511-762-3611

Coming agricultural events notice

1. Do you know of any provincial (Alberta), national or international agricultural meetings, conferences or conventions coming in 1999 or 2000?

2. Please state the **name** of the event(s):

3. **When** is the event being held?

4. **Where** is the event being held? Include city or town; hotel or convention centre, if known:

5. Please give **name, city or town, and phone number** of a **contact person** for each event listed:

6. This form has been **completed by** what organization? Please include your phone number:

Please return this form by February 15, 1999 to:

Lee Anne Palutke, Agri-News Editor
Communications Division
J.G. O'Donoghue Building
7000 - 113 Street
Edmonton, Alberta T6H 5T6
Phone: (403)422-6958
Fax: (403)427-2861
E-mail: palutke@agric.gov.ab.ca

"Coming agricultural events" is published quarterly in Agri-News.
The next list will be **March 1, 1999**.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51595 5363

Agri-News

December 14, 1998

Major minerals

Most livestock producers in Alberta feed minerals. Some add them in a grain mix and some provide them on a "free-choice" basis. In beef cattle, major minerals are those needed by the animals in large amounts and trace minerals are those required in very small amounts. The questions surrounding minerals is determining what kind, when, and at what levels.

"Too much of any one mineral can cause harm, and requirements of a particular mineral depends on what's available in the feedstuffs and the species, size and sex of the animal," says Bill Grabowsky, beef specialist with Alberta Agriculture, Food and Rural Development. "Requirements vary by the type of animal as well as the stage of production the animal is at."

Some of the major minerals are calcium and phosphorus and the levels of each vary with what is being fed. For example, grains are high in phosphorus while legume hay is high in calcium. Supplementing either of these is often needed when fed alone or in combination with other feedstuffs. Deficiencies of these two minerals can lead to decreased milk production, rickets and poor reproductive and calf performance. Ratios of calcium and phosphorus is very important and can be as minimal as 1:1 but never beyond 7:1.

"Animals' mineral needs must be met and the surest way to accomplish this is to add the required minerals to the diet, whether grain mix or silage mix," says Grabowsky. "Minerals that are fed free-choice should be monitored and weekly intake noted. This way, excess or reduced amounts can be corrected. In free-choice mineral supplements, salt is usually added to improve consumption as phosphorus is not very tasty."

Producers can talk to their feed suppliers and order mineral supplements containing 3:1, 2:1, 1:1 and 0:1 levels of calcium and phosphorus. Along with the these minerals, other major minerals like sodium, chlorine magnesium, potassium, sulfur are added in.

"Along with the micro or trace minerals, other minerals such as selenium and copper are often also added" adds Grabowsky. "To know which is the best buy in mineral supplements, calculate out the percentages in the bag and determine a cost per pound."

Cont'd on page 2

This Week

Major minerals 1

Winter ventilation in greenhouses 2

Picking out the perfect turkey 2

Research – food for thought 3

Trailer safety 3

Briefs 4

Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

Now is the time, before winter gets too severe, to evaluate the beef feeding program that will take a herd through to spring. Ration balancing can help fine-tune rations for profit and production. Producers are encouraged to drop by Alberta Agriculture offices to discuss winter mineral feeding programs or give one of the provincial beef specialists a call.

Contact: Bill Grabowsky
(403) 361-1240

Winter ventilation in greenhouses

Greenhouse ventilation in winter and early spring is a real challenge because of the cold outside air. Greenhouses that aren't equipped with a winter ventilation system face a problem of high relative humidity that can seriously slow down the growth of plants by slowing the root development.

"During winter, ventilation is required for reasons other than cooling," says Dr. Mohyuddin Mirza, greenhouse crops specialist, Crop Diversification Centre North, Alberta Agriculture, Food and Rural Development, Edmonton. "Most greenhouses are tighter structures and natural infiltration may no longer be adequate to control humidity and carbon dioxide levels. This is particularly true for polyethylene greenhouses."

A recirculating fan with an attached perforated polyethylene tube, a motorized air inlet louvre, an exhaust fan and a humidistat are essential components for a winter ventilation system. The capacity of the recirculating fan should be at least 10 per cent greater than the winter maximum rate of 2cfm/sq.ft of greenhouse floor area. This ensures that the cool air brought in by the exhaust fan adequately mixes with the warm air and is exhausted outside. The exhaust fan should be hooked to a humidistat.

A publication on greenhouse ventilation is available from the CDCN by calling (403) 422-1789. In Alberta, provincial government numbers are toll free by dialling 310-0000 first.

Contact: Dr. M Mirza
(403) 415-2303

Picking out the perfect turkey

Buying, storing, thawing and preparing - a lot goes into a turkey dinner before it is enjoyed on that special occasion.

"Turkey is synonymous with celebration events and dining at it's very best," says Lorea Ladner, food scientist with Alberta Agriculture, Food and Rural Development, Leduc. "Starting at the very beginning, a successful turkey supper starts with buying the bird. As with all packaged food, examine the food and its packaging at the store and again before it is used. Avoid turkeys in damaged, ripped or torn packaging."

Turkey is a perishable product, so storing is very important, also. If purchased well ahead of time, store turkey in the freezer at -18 C or lower until ready to thaw.

"Thawing a turkey is always a subject that generates many questions: what is the safest method? what is the quickest method? should a turkey be thawed slowly in the refrigerator, immersed in water or left to thaw at room temperature? All valid questions," says Ladner. "Never thaw a turkey on the kitchen counter! It is recommended that turkey be thawed in the refrigerator. A platter or plate large enough to catch any juice is advisable. Give yourself plenty of time to thaw the turkey, several days, in fact. Defrosting time can be calculated as 24 hours for every five pounds of turkey."

Turkey can also be defrosted in cold water. Be sure that it is in a leak proof plastic container or plastic wrap. The water should be changed about every half hour. Be sure to cook the turkey immediately after thawing.

"Preparation time is probably the most labour intensive part of a celebration dinner, adds Ladner. "Whether choosing turkey, chicken, ham or beef, be sure to give some extra care and attention to handling, preparing, cooking and serving meats. Be sure to wipe down surfaces both before and after preparing meat. Use clean utensils for cutting, scoring and lifting. Be sure to wash utensils in soapy water before using again."

It takes very little time to sanitize the surface where raw meat has been sitting before chopping up vegetables but it makes a huge difference in controlling the transfer of bacteria. The best rule to follow is to wash all surfaces and all utensils before and after using them. Use a tablespoon of bleach in a gallon of water to wipe surfaces on which raw meats have been prepared. This step helps eliminate bacteria.

"When the bird, roast or leg of lamb is ready to be popped into the oven, make sure to follow the guidelines for temperature and time and thoroughly cook meats," says Ladner. "Meat thermometers make it easy to monitor the internal temperature of meats to ensure they are cooked properly. Have a safe, happy and healthy celebration season."

Contact: Lorea Ladner
(403) 980-4869

Research – food for thought

Winter is a good time for farmers to consider the many options for next year's cropping plans. A good place to get information to assist in making changes during the next growing season is by looking at this year's research results.

"When looking at this past season's research results, it's important to remember that while they may not yet be 'packaged' for easy access, they have some good points to bear in mind," says Ron Hockridge, cereal and oilseed specialist with Alberta Agriculture, Food and Rural Development, Wetaskiwin. "There is some difficulty in applying research to farm situations. Researchers try to hold all other factors constant in order to measure one particular variable.

"On the farm, many factors vary at once and these other variables can enhance or mask the effect of the other variables. Take crop response to various rates of fertilizers, for example. Fertilizer trials are conducted with good weed control and adequate plant populations. This may not always be the case in practical application."

In 1998, Agriculture Canada scientists at Lacombe completed the first year of testing interactions among variables. The preliminary results raise some interesting ideas. For example, an economical response to fertilizers at higher than recommended rates can be realized but only if weeds are removed very early; delaying weed control to the four-leaf stage of the crop negates much of the benefit of extra fertilizer.

"Preliminary results do not refute previous recommendations made by crop specialists," adds Hockridge. "Many of the standard recommendations continue to be valid and still hold true. Practices that contribute to improved yield include early seeding, early weed removal, good plant population levels and a high level of plant nutrients in balance with each other.

"While tests haven't been done long enough to provide valid conclusions, they do stimulate a lot of thought about production practices and their effects."

Contact: Ron Hockridge
(403) 361-1240

Trailer safety

An interest in horses and trailer safety gave David Wilson his start in the horse trailer repair business in 1978. A Safe Trailer is a Happy Trailer, and that motto has helped Wilson build a successful business as well as making him a sought-after speaker on the subject at many conferences in and around Canada and the U.S.

"The organizing committee for the ***1999 Alberta Horse Breeders and Owners Conference*** have arranged for David Wilson to conduct a session on Trailer Safety," says Les Burwash, head of equine programs, Alberta Agriculture, Food and Rural Development, Airdrie. "The conference features 16 internationally acclaimed speakers and this year's agenda is full of presentations that Alberta horse enthusiasts will find interesting and informative."

Wilson has been involved in the horse industry since he was a teenager. He is past president of the Santa Rosa Driving and Riding Club, Redwood Empire Appaloosa Club, Sebastopol Ranglers and is presently Master of Bellevue Grange, Santa Rosa, California. Wilson has given safety lectures at horse clubs and humane societies across the continent.

The conference program is designed for a particular breed preference, Arabian, Quarter Horse, Thoroughbred and all breeds. However, conference participants can attend any of the sessions and will receive the printed materials from all sessions.

"The main areas of interest covered by our guest speakers include, nutrition; horse health care; new training practices; and, the horse industry as a business," adds Burwash.

Conference registration is $75 per person. For more information about the 1999 conference, contact Burwash in Airdrie at (403) 948-8538.

Contact: Les Burwash
(403) 948-8538

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51595 5488

Agri-News Briefs

Principles and procedures of plant tissue culture

The Fruit Growers Society of Alberta, Alberta Seed Potato Growers Association and the Crop Diversification Centre North are offering a two-day course, January 27 and 28, 1999. The course includes hands-on training on tissue culture techniques used in propagation of seed potato, fruit crops, landscape plant material and other selected species. The course objective is to educate participants in day-to-day operation of a commercial plant tissue culture laboratory and to familiarize them with the production of plants via *in vitro* techniques. A registration fee of $200 plus GST, includes all materials and instruction costs, coffee and lunch. The deadline for registration is January 15, 1999. Contact Dr. Mohyuddin Mirza (403) 415-2303 or Kris Pruski (403) 415-2316.

Daily price info for herb, fruit and vegetable markets

Today's Market Prices (TMP) is an on-line service that gives daily price information on more than 180 herbs, fruit and vegetable commodities from all wholesale markets of Canada, USA, Mexico, Latin America, Brazil, Europe and Asia. TMP takes all the data and prepares tables ordered by product, market or origin of the commodity, including variety, size, packaging type and bid price. Weather, market conditions of the day and offerings trend information is also available. The TMP service is completed by a *Green Links* page, where agri-surfers can contact hundreds of related sites, and a *Green Business Corner*, where product offerings or requests can be electronically posted. For more information, contact TMP by e-mail at webmaster@todaymarket.com The address of TMP's on-line service is **http://www.todaymarket.com**

Oldman River Basin water quality workshop

The ***Oldman River Basin Water Quality Initiative*** is holding its second annual workshop at the Lethbridge Lodge Hotel on January 12, 1999. The meeting is an opportunity for the initiative workgroups to present their activities and findings to the broader group of stakeholders. It is also a framework for planning the year two activities for the initiative. The Oldman River Basin Water Quality Initiative was established to bring together leaders from health, agriculture, environment, municipalities, education and industry to ensure a continual supply of fresh, clean water to the communities along the Oldman River Basin. Registration is at 8:00 a.m. and the one-day meeting is expected to wrap-up by 4:30 p.m. Cost of registration is $30 and registration deadline is January 5, 1999. For further information or to register, contact Wendy Granson in Lethbridge at (403) 382-6650.

Agri-News

December 21, 1998

Financial management counselling for farmers

Farming is a risky business. When income drops, expenses climb, or both happen at the same time, financial problems can put a strain on the farm. A third party opinion is often useful to guide a producer during this difficult time. The Financial Management Counselling Service, offered by Agriculture and Agri-Food Canada, can help farmers work through financial difficulties.

"The Financial Management Counselling Service is available to Canadian farmers experiencing farm financial problems," says Dean Dyck, farm management specialist with Alberta Agriculture, Food and Rural Development. "For a nominal fee, this service provides qualified counsellors to work with farmers to help prevent more serious financial problems. The service helps farmers assess their current financial position and develop a plan for future success."

To be eligible for this service, a producer should be or will be experiencing one or more of the following:

- incurring losses;
- facing decreasing margins;
- having difficulty paying bills as they come due;
- not revolving the operating loan - unable to reduce the loan balance regularly, or the loan will not be extended; and,
- timing and amount of income and payments don't match, putting a strain on cash flow.

"When a producer signs up for the program, a qualified consultant is assigned to assess the current financial position of the farm and develop a plan for future success," says Dyck. "These consultants are understand farming and farm businesses. In fact, many are farmers themselves."

Producer must have their basic farm bookkeeping in order or readily accessible. Using these records, the consultant will prepare an up-to-date set of financial statements, including an income and expense statement for the past two years, a current balance sheet, and a one- to two-year income and expense projection based on continuing the existing operation. The consultant will then analyze the statements and look at the overall operation to identify any problems and possible alternatives. In the final stage, the consultant will work with the producer to develop a two- or three-year operational plan, including cash flow and income and expense projections.

Cont'd on page 2

This Week

Financial management counselling for farmers 1

T'is the season to think safety 2

Plan ahead for turkey leftovers 2

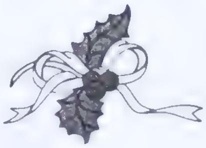
Backyard race horse 3

Warm conditions continue into November 3

Preg check or not? 4

Agri-Industry: Boundless Growth? 4

Briefs 5



Agri-News **Publishing Branch, Tel: (403) 427-2121 Fax: (403) 427-2861**

Internet site: www.agric.gov.ab.ca/agrinews Editor e-mail: agrinews@agric.gov.ab.ca

Alberta
AGRICULTURE, FOOD AND RURAL DEVELOPMENT

"The fee is $100 and the process takes only three to five days, spaced out over a few months," adds Dyck.

To enroll for the service, call toll free 1-888-495-3212. The Financial Management Counselling Service can also be reached on the Internet at:

http://aceis.agr.ca/policy/adapt/fcs.html.

For producers who don't have Internet access, check with local libraries or schools.

Contact: Dean Dyck
(403) 340-7007

T'is the season to think safety!

Safety is an important part of Alberta farm life everyday of the year. During the holiday season, days are full and evenings can be long but the farm chores still must be done.

"The festive season is a time of year to pay particular attention to safety on the farm," says Solomon Kyeremanteng, head of the Farm Safety Program with Alberta Agriculture, Food and Rural Development. "The pace is often very fast during this holiday and it can sometimes seem like there's just no time to relax. Getting over tired can lead to trouble."

During a recent campaign ***Win With Farm Safety***, the safe farm concept was communicated to southern Alberta farm families. Families were asked to explain their common-sense approach to safety and highlight their home-grown safety inventions. Many good ideas were sent in by Albertans, one being to make sure that being over-tired doesn't jeopardize safety when working on the farm.

"This is a time to rejoice, spend time with friends and family," adds Kyeremanteng. "Our wish for the holiday season is that farmers pace themselves so they don't compromise the task at hand nor their personal safety. Remember to work safely and play safely this season and throughout the year."

Farm Safety is a positive message that is making an impact on Alberta's agricultural community. The recent safety campaign was initiated jointly with CISA TV in Lethbridge and Alberta Agriculture, Food and Rural Development's Farm Safety Program. The campaign won the Canadian Association of Broadcasters Golden Ribbon Award; one of the highest awards a media campaign can receive.

Contact: Solomon Kyeremanteng
(403) 427-4227

Plan ahead for turkey leftovers

You've thawed it, stuffed it, cooked it, the whole family enjoyed it and you know there's at least a couple of meals left on that-there bird. Taking a little extra care with wrapping and refrigerating or freezing the leftover turkey will ensure that when it's time to make another turkey dish, the meat will still be fresh, tasty and healthy.

"It all begins with deciding how big a turkey to buy," says Janice Shields, promotion coordinator for Alberta Turkey Producers. "By estimating about one pound per person, there should be enough turkey left after the big feast for some tasty 'plan-overs' afterwards."

Keep these helpful hints in mind when handling leftover turkey meat:

- remove the turkey meat from the bone and remove the stuffing
- turkey gravy and stuffing should be stored separately in their own containers
- promptly refrigerate leftovers in smaller portions or in shallow containers so the meat cools quickly
- leftovers should be re-heated to 160°F (71°C)
- gravy should be brought to a rolling boil and stirred during reheating
- refrigerated turkey leftovers should be used within four days
- for longer storing, freeze in air-tight containers or wrap the meat well before freezing
- gravy and stuffing should be used within two days

"There are several sources of information where Alberta consumers can get food safety information," says Lorea Ladner, food scientist with Alberta Agriculture, Food and Rural Development, Leduc. "The Alberta Home Economics Association has a toll free hotline devoted food safety. The Food Safety Info Line (FSIL), accessible by dialing 1-800-892-8333, is answered by professional home economists. Information on safe food handling practices is also available on the Canadian Food Inspection Agency's website at **www.cfia-acia.agr.ca**"

"For recipes that use leftover turkey, such as Turkey Corn Chowder or Crunchy Turkey and Cranberry Pie, visit the Alberta Turkey Producers website at **http://www.abturkey.ab.ca/** click on '***What's New***' and then go to the recipes section. This section features lots of information on buying, preparing and serving Alberta Turkey."

Contact: Lorea Ladner *Janice Shields*
(403) 980-4869 *(403) 465-5755*

Backyard race horse

It's called the 'Black Stallion' syndrome. It refers to people who always wanted to own a race horse but don't participate in the racing industry because of the cost and perceived danger to horse and rider alike.

"Horse racing is a fascinating sport," says Les Burwash, manager of equine programs with Alberta Agriculture, Food and Rural Development, Airdrie. "At the ***1999 Alberta Horse Breeders and Owners Conference***, Janet Del Castillo will make a presentation called Backyard Race Horse. She encourages horsemen to do most of the early work themselves. A practice that saves a tremendous amount in training costs and protects the health and soundness of the horse."

Del Castillo uses her personal experiences as a basis for her program. She picked up a throw-away mare, donated to a children's home, and turned her into a solid stakes winner in Florida, winning purses totalling $315,000. By training and conditioning the horse herself, the mare ran soundly for five years.

"The presentation by Del Castillo is very motivational and thought provoking," says Burwash. "She will cover points on how to purchase a prospective race horse, general conformation for racing, where to go to find a prospective horse, what to look for in bloodlines, how to begin and what to avoid in the business of horse racing. The main thrust of her presentation focuses on keeping a horse sound in the process of training and how that training can be done on the farm."

Each year in Alberta, the horse industry section of Alberta Agriculture organizes the Alberta Horse Breeders and Owners Conference. The event is the premier horse conference in North America and one that Alberta's horse enthusiasts look forward to. The 1999 conference is being held on **January 8, 9 and 10, 1999** at the Capri Centre in Red Deer

"The 1999 conference features 14 internationally recognized speakers," says Burwash. "The organizing committee has put together an excellent program of speakers and presenters again this year. Topics such as new equine nutrition and research, pre-purchase exams, trailer safety, and the value of a versatile horse are also included in the agenda."

The conference is arranged so that attendees can follow four streams of interest – Arabian, Quarter Horse, Thoroughbred and all breeds. While many follow the program designed for a particular breed preference, conference participants can attend any of the sessions and will receive the printed materials from all sessions.

Conference registration is $75 per person. For more information about the 1999 conference, contact Burwash in Airdrie at (403) 948-8538. Government numbers are toll-free by dialing 310-0000 to connect to a RITE line.

Contact: *Les Burwash*
(403) 948-8538

Warm conditions continue into November

Preliminary data indicate Alberta's climate of 1998 through November was the warmest since 1987 and the second warmest since 1941. Temperatures have been above normal five months in a row, and nine out of eleven months for 1998.

November temperatures were above normal for most stations in Alberta. Temperatures ranged from one degree below normal to 3.7 degrees C above normal during the month. The overall provincial average temperature was one degree above normal.

"November started off sunny and warm with day time temperatures reaching about 10 degree C," says Peter Dzikowski, agri-weather specialist with Alberta Agriculture, Food and Rural Development. "Daytime temperatures slowly fell to near freezing by the end of the first week, however the warm weather returned the second week of November. During the third week of November the below normal temperatures returned. Temperatures were above normal the last week of November with little precipitation reported."

The provincial average precipitation was slightly below normal for November in Alberta. The weather averages reported here are based on data recorded at 62 Environment Canada climate stations across Alberta.

"The provincial average November precipitation of 15 mm was 4.7 mm below the 1961 to 1990 average of 19.7 mm," adds Dzikowski. "The province is heading into its dry season, December to February, when monthly precipitation amounts are less than half of the average in summer months."

The northwest region reported near normal precipitation and all other agricultural regions reported below normal precipitation in November. Amounts of 1.6 to 39.2 mm, or 11 to 207 per cent of normal were reported.

Stavely west reported 39.2 mm, the greatest precipitation departure, 207 per cent of normal. On the dry side, Medicine Hat reported 1.6 mm of precipitation in November, only 11 per cent of the area's long term average.

Contact: *Peter Dzikowski*
(403) 427-3594

Preg check or not?

Some beef producers pregnancy check their cow herds every year and others do not. Preg checking is a management decision that each producer must make for their own operation. While it certainly isn't mandatory, there are many reasons for checking for open cows.

"Reproductive value is probably the most important criteria in evaluating the decisions to preg check or not," says Bill Grabowsky, beef specialist with Alberta Agriculture, Food and Rural Development, Wetaskiwin. "Whatever the reason for culling open cows, producers should consider all of the advantages and disadvantages."

Part of many producers normal culling program includes replacing open cows with bred heifers. If a cow is open and has a bad udder, has a fertility problem, or has a temperament problem, it is generally sent to market and replaced with a bred heifer.

"Identifying open cows by preg checking, gives producers the option to feed out and rail grade the cow when the market is higher,"adds Grabowsky. "Traditionally, market prices for cull cows are better in January, February and March. If feed costs per pound of gain are low and death loss and sickness aren't a problem, a dollar can be made in this situation."

Feeding open cows over the winter may not be economical if there is a shortage of feed. Winter feed per cows runs at about $1.00 per head per day and replacing or finding extra feed is costly.

Purebred producers sometimes risk keeping open cows when the value from the next sale of her purebred offspring will compensate one year's losses with the profit earned the following year. The sought after genetics, such as high rate of gain, may be more valuable than the cost of overwintering the purebred cow. This decision is based purely on profit potential.

"Lastly, many producers pregnancy check their herd mainly because it's a good, normal management practice to do so," adds Grabowsky. "Cull cows and open cows are usually replaced with 'in-herd', genetically superior pregnant heifers. Herd performance is usually improved by adopting this practice. Base culling decisions on fertility and it will be the best tool a producer can use to keep or cull open cows."

Contact: *Bill Grabowsky*
(403) 361-1240

Agri-Industry: Boundless Growth?

A conference for all Agriculture stakeholders is being held at the Capri Hotel and Conference Centre, Red Deer, on January 22 to 23, 1999. The conference focuses on where the industry is headed and where the boundaries to growth are likely to come up in the future.

"The conference provides an opportunity to meet other industry representatives, customers, government representatives and potential partners," says Don Diduck, conference organizer at the Alberta Congress Board. "Delegates will have the chance to hear from industry experts and participate in sessions on the role of media in promoting the industry."

Participants will be able to actively join in discussions on functional foods, value chains, implications of the post-Crow era, investment and finance, niche marketing, food safety, and the latest on global trade negotiations.

"Conferences such as this are an excellent place to voice ideas and opinions," says Diduck. "The agenda is full of speakers of the highest calibre and plenty of time has been designated to allow for free-flowing discussions. The keynote speaker for the conference is Dr. Grant Devine, former Premier of Saskatchewan."

Speakers include: the Honourable Ed Stemach, Minister of Alberta Agriculture, Food and Rural Development; Joe McGuire, parliamentary secretary to the Minister of Agriculture and Agri-Food Canada; Dr. Michael Percy, Dean of the Faculty of Business at the University of Alberta; Doug Campbell, president of Campbell Agribusiness; Garnet Altwasser, president of Lakeside Packers/IBP; Cam Crawford, chairman, AgriVest Capital Corp.; Aron Falkenberg, chairman, Alberta Chicken Producers; Dr. Susan Lutz, coordinator of functional foods, Centre of Excellence at the University of Alberta; Ron Pettitt, branch head, Food Processing Centre, Leduc; Dianne Finstad, agriculture director of RDTV; Judy Schultz, food editor, Edmonton Journal; Ric Swihart, agricultural editor, Lethbridge Herald; and, Ian McDonald, producer/announcer, CISA TV, Lethbridge.

Conference registration is $200 (plus GST). Registration before January 8, 1999 is recommended. There is a late fee of $25 when registering after January 8.

For further information about the conference, contact Diduck at the Alberta Congress Board (403) 421-9330 or e-mail: **congress@sas.ab.ca**

Contact: *Don Diduck*
(403) 421-9330

Agri-News Briefs

Protecting livestock from weather

Protection from wet and windy conditions during winter can reduce feed requirements of cattle and sheep by 20 per cent or more. Protective shelter also reduces the incidence of fever and pneumonia. Efficient and inexpensive shelters of eight to 10 feet high fences with 20 per cent porosity, should be provided when and where practical. Snow fences and tree bluffs can be used to advantage if available. It is important for the health of the herd to provide well-drained, adequately bedded areas. Access to a shed to keep rain and snow off livestock is desirable as long as the building or shed is properly ventilated. For further information or to ask questions about winter maintenance of livestock, contact the district Alberta Agriculture office and ask for the beef or livestock specialist.

One Man's Trash is Another Man's Treasure

The annual Direct Seeding Workshop in Fairview on January 14, 1999 will cover a wide variety of topics. Direct seeding issues, such as successful crop rotations, climate conditions in the Peace, transgenic and fall seeding of canola, pea inoculation use and application, row spacing, time of weed removal and spraying out of fescue are all on the agenda. Speakers at the workshop include: Gary Martens, University of Manitoba; Gary Ropchan, Central Peace Conservation Society; Gary Coy, Canola Council; Wendal Rice, Beaverlodge Research Center; as well as staff members from Alberta Agriculture, Food and Rural Development: Roger Andreiuk, Lawrence Papworth and Shane Chetner. The workshop is being coordinated by Alberta Agriculture with support from Prairie Farm Rehabilitation Administration (PFRA) and the Alberta Reduced Tillage Initiative (ARTI). Registration is $10.00 at the door and includes a copy of the proceedings. For more information, contact Randy Perkins, acting conservation coordinator with Alberta Agriculture, at (403) 835-2291, Fairview.

Farm succession

A series of seminars on Succession Planning is planned for 1999. The seminars feature a team of excellent speakers to address the topic of succession planning. They include: Barbara McNeil, McNeil & Associates, whose ability to understand and explain the importance of family relationships in succession planning is the reason she is the lead-off speaker; Phil Renaud and Tracy Hanson, lawyers with the firm of Duncan and Craig. Renaud has lectured throughout the province on estate planning, mediation and family law and Hanson, a professional agrologist and lawyer who understands the southern Alberta farming and ranching industry; Dereka Thibault, chartered accountant with Manulife Financial who will speak on farm taxes; and Garry Bradshaw, farm management specialist with Alberta Agriculture, Food and Rural Development who has for the past 20 years, worked with hundreds of farm families and written many of Alberta Agriculture's succession planning publications. The two main sponsors of the seminar series are Manulife Financial and the Legacy Group. Dates and locations for the seminars are:

- Lethbridge Lodge, Lethbridge — January 19, 1999
- Crossroads Hotel, Calgary — January 21, 1999
- Denham Inn, Leduc — January 26, 1999
- Golden Inn, Grande Prairie — January 27, 1999

Cost of the seminar is $50 for the first person and $25 for each additional family member. To register, call 1-800-387-6030, both Visa and MasterCard are accepted. For further information, contact Brad Smith (403) 223-7907, Taber; Ted Darling (403) 948-8524, Airdrie; Dean Dyck (403) 340-7007; or George Monner (403) 835-2241, Fairview. (Note: *In January 1999, the new area code 780 comes into effect for central and northern Alberta. For more information, contact Telus at 1-888-223-0300.)*

Business is Surfin'

Alberta Agriculture, Food and Rural Development and Canadian Rural Computer Services Inc. (CRCS) are offering hands-on internet training, especially designed for farmers and agribusinesses. Harvesting the Internet, is a one-day training course focussing on the specific use of the internet as a business tool in agriculture. Alberta Agriculture specialists work with CRCS instructors showing participants how to maximize the benefits of using the internet to get information that will be valuable to Alberta farm businesses. CRCS uses a mobile computer lab to deliver the course just about anywhere in the province. Agricultural organizations interested in providing internet training for their members can contact Ted Darling, farm management specialist with Alberta Agriculture, Airdrie at (403) 948-8524 or Jory Lamb, CRCS in Calgary at (403) 263-2727. Starting this season, Albertans will be able to take the Harvesting the Internet course from home by through the Agri-Ville schoolhouse at **http://www.agri-ville.com**

Preparing for the new millennium and beyond

The 3rd Annual Convention and Seminar of the Wild Rose Agricultural Producers (WARP) is being held on January 7 and 8, 1999 at the Red Deer Lodge. During the two-day event, the seminar will feature several presentations on subjects such as: Farm Financing for the Future; Changing Times in the Grain Business; International Trade and the WTO; Municipal Partnerships; Rail Transportation and Agriculture; Biotechnology; and, Canadian Perspectives for the Year 2000. Cost for the seminar and convention is $80 per person. The names of all those pre-registered before December 31, 1998 will be entered in a draw to win a $100 gift certificate from UFA and lodging at the Red Deer Lodge on January 7. For further information, contact Rod Scarlett at WRAP at (403) 451-5912 or e-mail: **info@wrap.ab.ca** Check the WRAP website at:
http://www.wrap.ab.ca/newsletter_3.html

National Library of Canada
Bibliothèque nationale du Canada
3 3286 51595 5603

Merry Christmas